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The purpose of the project was to determine the most effective teaching methods for reaching the Mexican American population of El Paso, Texas, with Extension educational programs. An initial study in 1962 brought into focus characteristics and situations of Mexican American families for the purpose of evaluation. One population was subjected to heavy Extension activities including mass media, mailed information, and formalized classes in home economics and health. A second population was subjected only to those sources of mass media available to the individual families, such as radio, television, and the newspaper. The 1964 evaluation study indicated that the information mailed to the first population was the most successful disseminator of information, followed by television. The second population indicated that of the available media, television was the most effective. In the terminal evaluation of 1968, mailed information and television were almost identical in effectiveness in reaching homemakers, closely followed by the newspaper and classes. (DK)

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Extending Cooperative Extension Education To Mexican-American Families Program, Methods and Evaluation

A Report of a Research Study
El Paso, Texas 1962-1967

DANIEL C. PFANNSTIEL/STARLEY M. HUNTER

TEXAS A&M UNIVERSITY • TEXAS AGRICULTURAL EXTENSION SERVICE
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Highlights of the Project

PURPOSE, PLAN AND PROCEDURES

THE TEXAS AGRICULTURAL EXTENSION SERVICE needed information to help it extend education more effectively to the Mexican-American population in the state. The combination of the culture and low-income level of the people had made extension of educational programs to this group more difficult than to other groups. There was an urgent need to reach a higher proportion of this growing population with ongoing educational programs.

At the request of the Texas Agricultural Extension Service, the Federal Extension Service of the U.S. Department of Agriculture allotted Special Needs Funds for employment of a home demonstration agent and necessary operating expenses on a year-to-year basis. This permitted the initiation of a project, the purpose of which was to determine the most effective teaching methods for reaching the Mexican-American population with Extension educational programs.

The project was carried out in El Paso County. A high proportion of Mexican-Americans in rural and metropolitan areas and interest of the County Program Building Committee influenced the location choice. After one year of work in the city and county, the home demonstration agent was placed in a well-defined area of 1,700 to 1,800 families located in the southern part of the City of El Paso. This made possible her reaching a population for which a reasonably exact evaluation of a clearly defined program could be made.

The experimental area was divided into two subareas designated as Areas I and II. In Area I an Extension home economics program was conducted directly with the population. In Area II no program was taken directly to the people but mass media were used to reach families. It was anticipated that information would "spill over" into Area II from the Area I direct program.

The El Paso County Extension staff, state Extension administrators and specialists, district supervisors and a Federal Extension Service staff member participated in program determination and plans for program execution. A survey was made in September 1962 to guide program development and to determine homemakers' characteristics, family situations and selected practices employed in the homes. Information obtained later served as a bench mark for evaluation of effectiveness of methods employed and of change in situations and practices of families in the areas.

An Assistant Extension Director was assigned to head the project. Under his guidance, persons involved in the project met periodically to plan detailed program content and methods and to prepare a calendar of work to insure coordination and timely flow of information. In April 1964, an Evaluation Study was made to determine the effectiveness of methods used and to provide information for any needed program adjustment. At this time, the home demonstration agent resigned and a second agent was employed.

The total project extended from July 1962 through December 1967. In January 1968, a final Evaluation Study was made to determine effectiveness of methods and program.

SITUATION STUDY OF 1962

This study brought into focus characteristics and situations of Mexican-American families, 80 percent of which were husband and wife units. Eighty-nine percent of all families had children, and the average number of children in these families was 3.6. Over half had children under 14, and some had children in each category (0-5, 5-9, 10-14, 15-19 and 20-21). "Other adults" (not male heads or homemakers) constituted almost 4 percent of the total population. Dependents weighed heavily on these Mexican-American household heads.

Of this young population, only 8 percent of both male heads and homemakers were 60 years or over. Slightly over 40 percent of both male heads and homemakers were under 40 years of age.

A third of the homemakers and a fourth of the male heads had four grades or less of schooling, and approximately half had none above the sixth grade. Forty-five percent of the children had completed fewer years in school than is normal for children at given ages or had dropped out of school.

Forty percent of the families lived in public housing units and the remainder in private dwellings. Of the latter, 77 percent either owned or were buying their homes. Private dwelling residents were a stable population. Public housing residents were more mobile.

Three-fourths of the families lived in five or six small rooms under crowded conditions. Many large families were taxed for sleeping and eating space. Almost all families had some kind of refrigeration and all except two had heating fuel. Facilities considered necessary for reasonably satisfactory living were available to most families. Sixty percent of the families had a car or truck, but only 15 percent of the homemakers were able to drive. Public transportation was available.

Employment and Income

Seventy-one percent of the households had employed male heads and 22 percent had employed homemakers. Of the employed, 17 percent of the male heads and 40 percent of the homemakers were employed as operatives. Five percent of the male heads were employed as foremen and managers; others were in low-paying jobs. Competition for jobs came from workers in metropolitan El Paso as well as from Mexican Nationals who crossed the border to work.

Sixty-five percent had incomes under $3,500. Only 12 percent had incomes of $5,000 and over. Per capita income was well below the poverty level for most families. The elderly, very young and large families were most deprived.

Income was *not* related to the educational level of the worker. Most families with the highest and lowest incomes had wages from male and/or female household heads and supplemental income from wages of other family members or sources of income other than current wages. Almost three-fourths of the families with incomes of $1,500 to $3,499 subsisted on the wages of one earner. These primarily were families with children under 14 years.

In income classes above and below this level, wages from one to five persons or other supplemental income contributed to the total family income. Over half of these families used the layaway plan and over three-fourths used installment buying. Almost 40 percent had borrowed $10 or more during 1967. Of these, over 50 percent had borrowed from what probably was a high interest rate source.

Food, Clothing and Management Situations

Homemakers were asked a series of overlapping questions distributed throughout the interviews concerning food habits, food expenditures and food-buying practices. Except for milk, responses homemakers gave to a question concerning which family members had had servings from the four food groups at meals the day before were not in accord. Responses to questions on consumption of three of the food groups were inflated relative to questions concerning family meals. The quantity of milk purchased and milk consumed was approximately the same. Milk consumption averaged slightly over 3 quarts per person per week for the total population. Only one family had no milk.

Thirty-four percent of the families reported they spent from $5 to $15 per week for food; 41 percent spent $20 or $25; and 24 percent spent $30 and over. In the food expenditure groups who spent $15 and over, there were families in every size, from one and two persons to nine and over. Only one family of nine (eight of which were small children) spent as little as $5 per week for food. However, eleven families of three to six persons spent $10 per week.

The average-sized family of 5.22 persons who spent from $10 to $30 per week for food would have spent from 9 cents to 27 cents per meal per person. Many families of six to nine and more persons spent the above amounts for food, and the per meal expenditure decreased accordingly. Less than 30 percent to over 60 percent of family incomes were spent for food, depending upon the family size.

Most family incomes were inadequate to purchase low-cost adequate diets or even enough food for many growing children and the elderly with under $1,000 incomes. At the time of this study, neither donated foods nor food stamp plans were available in the area. Purchased food was the only known source.

Cheese, meat, beans and coffee were products thought important in the diets of Mexican-Americans. Consequently, homemakers were asked how many pounds of these foods they usually purchased per week. Ninety percent purchased 2 pounds or less of cheese and 10 percent purchased none; 50 percent purchased 6 pounds or less of meat and 2 percent none; 90 percent purchased 6 pounds or less of beans and 1 percent none; and 85 percent purchased 2 pounds or less of coffee and 10 percent none. This quantity of meat allowed approximately 1 pound per week per person for average-sized families.

Diets for at least three-fourths of the families depended heavily on beans and bread stuffs with sufficient meat for seasoning beans, stews and soups.

Two-thirds of the homemakers said they decided what food to buy and over 90 percent purchased most of their food in supermarkets. In young families, many husbands and wives shopped for food together, but as age level rose, the proportion fell to 4 percent of those 60 years and over.

Forty percent of the families bought most of their meat in Juarez, Mexico, and lesser numbers bought vegetables and staples. Most of the lower income and one- and two-person families bought no food there, but as family size increased, the proportion who purchased in Juarez rose to 52 percent of families of nine or more persons. This increased dollar-purchasing power. Most families bought little or no "convenience foods," soft drinks or meals away from home. Only school children, factory workers and waitresses had some meals away from home.

Many Mexican-American families shopped together for clothing, all of which was purchased in the United States. Approximately two-thirds of the homemakers said they read labels or asked clerks about fabric-laundering qualities. Values related to clothing small children were not unlike that of other population groups. Most of the homemakers purchased what they thought would give long wear at minimum price.

Two-thirds of the homemakers had sewing machines. Almost half of the women made some family clothing. A few made most of the family clothing, and most of these had under $3,500 income. Over three-fourths of all homemakers said they altered clothing to improve the fit. Over 80 percent of the women said they would like to learn more about fitting and constructing clothing.

Laundry was a daily job for 8 percent of these homemakers, a twice-a-week job for 40 percent and a weekly job for a like proportion. Six percent washed by hand, and a like proportion used a laundromat. Almost two-thirds of the women had wringer-type washing machines and a fourth had automatic machines.

Social Participation and Health Facilities

Social contacts for these homemakers were almost totally dependent upon the extended family. Almost 90 percent of them did not belong to church-related groups or social organizations, and there was relatively little social intercourse among families within neighborhoods.

Approximately half of the families utilized health facilities in the locality. The Public Health Clinic was utilized by the highest proportion of families. These were primarily families with children. As the age of the homemaker rose, the proportion utilizing clinics decreased.

Cultural Background

Fathers of almost half of the Mexican-American homemakers in the area were Mexican Nationals. Of the remaining 50 percent, only 10 percent had migrated to the United States in the ten years prior to this study. The predominant language spoken in the homes was Spanish, and 30 percent of the homemakers spoke no English. Over half of them, largely younger homemakers with more years of schooling, could speak and read both Spanish and English. The lowest and the highest income classes were most disadvantaged in respect to language facility.

Facts and impressions gained suggested that the extent of acculturation to the United States varied greatly among individual families. Some families had tortillas, some bread and some both at the same meal to accommodate the young and the old.

Failure of elderly people to use health facilities available and the high death rate of Mexican-Americans at a relatively early age may be because of undisclosed cultural factors, economic circumstances or both.

All information points to a high value placed on caring for the extended family. Households of both elderly and young homemakers included small children and older youth not of the primary family. Income from relatives not of the household and income from meager wages sent to relatives in other localities indicates the strength of this value.

Differences Between Family Situations in Public Housing and Private Dwellings

Homemakers in public housing on the average were younger, had more children under 5 years and slightly larger families, completed more years in school, read less, more were bilingual, had lower incomes and no equity in property and were more mobile than homemakers in private dwellings.

Social intercourse between families in public housing and private dwellings was limited. Homemakers from private dwellings appeared reluctant to attend activities which involved homemakers from public housing, and the reverse appeared to be true, also. Essentially, public housing and private dwelling families constituted separate communities although located contiguously. The differences between the families of these two groups were a major problem in planning and carrying out an educational program in the area.

EVALUATION STUDY OF 1964

Significant Differences Between September 1962 and April 1964

There were no changes in the population or in family situations which were sufficiently large enough to show statistically significant differences between 1962 and 1964. However, changes did affect some families adversely. The population of "other adults" rose 1.72 percent relative to the total population, and the child population increased 1.45 percent relative to adult household heads. The percent of families spending specified amounts for food each week decreased. Also, there was a shift in employment in various types of work which indicated some downgrading of jobs held by Mexican-Americans in the area.

Behavioral Changes and Comparative Effectiveness of Methods

In 1962, home visits and a monthly newsletter for information and program announcements were the methods selected to hasten awareness of the home economics Extension program in Area I. Other methods employed were television, radio, newspapers, posters, exhibits and classes, as well as combinations of these methods.

Methods employed were successful in bringing new knowledge to more than 80 percent of the homemakers. However, diets virtually did not change between 1962 and 1964. Responses of homemakers concerning foods served the family during the 24 hours preceding the interviews indicated that diets had not improved as a result of increased nutritional knowledge. Families were subsisting largely on bread stuffs, beans, starchy vegetables, eggs and an average of slightly more than 3 quarts of milk per person per week. Expenditures for foods had decreased slightly, and family size had increased slightly on the average. The Consumer Price Index had risen but incomes had not risen proportionally.

The four food groups needed for growth and the maintenance of good health of families in the *Food for Fitness Guide* were presented several ways to the population. In Area I, in which the direct educational program was conducted, the 1964 Evaluation Study showed the percentage of homemakers who had seen or heard about the four food groups increased from 8 to 51 percent over the 18-month period.

This awareness of food groups and those able to name them included homemakers in every age level and income class. Those who could name milk increased from 2 to 56 percent; meat from

2 to 59 percent; vegetables and fruits from 0 to 55 percent; and breads and cereals from 1 to 40 percent. Less than 1 percent could name the four groups in 1962 while 29 percent named the four in 1964. Over a third of the homemakers with incomes under $1,500 were able to name one or more of the four food groups; 23 percent named all four. From 36 to 78 percent of the women in income classes above this level were able to name one or more of the four groups. A higher proportion of homemakers between 30 and 50 years of age were able to name one to three or all four groups than those in other age levels.

Seventy-one percent of the homemakers credited the letter with enclosed literature on food groups as their source of information. Television was the source of information for 21 percent and classes for 12 percent.

As the source of information, the letter predominated in all income classes and for all educational levels of homemakers. Television was surpassed by classes for women with from one to three years of high school and for women with incomes of $1,500 to $2,499; otherwise, it was the second most important source of information for homemakers. These were young women with small children who could not attend classes. Friends and neighbors as a source of information exceeded classes for women with four or more years of high school and for women in the middle-income class; otherwise, the third most important source of information was classes.

As a source of information in Area II, television was the most effective and letters, friends and neighbors were equally effective. Letters were not sent to these homemakers unless they called the county office and specifically requested them, but the information was passed on to some of them by women from Area I. Newspapers were an important source of information for women below the top income class and the top educational level. Friends, neighbors and children did not reach any women who had not attended school and whose incomes were under $1,000. Classes and demonstrations given in the health clinic reached some. Of those who had the information, the letter and television were clearly the most effective methods.

Another phase of the foods and nutrition educational program was weight control. Approximately 60 percent of the women in both areas received information on this subject. More than 90 percent of those who received information in both areas were able to designate health conditions associated with overweight. Letters and television were almost identical as sources of information in Area I, and television followed by radio were the most effective methods in Area II.

When four selected phases of the foods and nutrition program were brought together, the most effective methods in reaching the population in Area I were distinct: first, letters with enclosed literature; second, television; and third, classes. In Area II, the most effective methods were television first, with newspapers and radio equal in effectiveness.

Characteristics of Homemakers Who Attended Classes and Results of Classes

The term "class" was adopted for use to connote all direct teaching. To obtain enough responses to insure validity, schedules were taken from women recorded on class roles who were not drawn in the random sample. These interviews and those in the random sample which showed class attendance were combined. Seventy-two schedules were obtained which was a high proportion of all women who attended any classes. This number also included women who saw demonstrations at the health clinic but who did not purposely attend classes.

Women who attended classes had families larger than the average size in the area. Range in size was from 1 to 14 persons. Although some women in the lowest income classes and educational levels attended classes, most were in the middle levels. Slightly less than a fourth of all homemakers were employed. The proportion of employed homemakers who attended classes was approximately the same.

Eleven percent of the homemakers in Area I had attended foods and nutrition classes. From 47 to 58 percent said they had prepared some of the dishes demonstrated in classes for family meals.

The proportion of homemakers in the study area and in classes who reported methods of acquiring information in foods and nutrition were about equally divided between classes and mailed information. Approximately two-thirds to three-fourths of the women who attended classes said they had adopted various practices taught in classes.

Clothing classes were attended by 16 percent of all women and by 54 percent of the women who had attended any classes. Few homemakers with incomes of less than $1,500 attended. From two-thirds to three-fourths of these women had obtained information on how to fit and alter clothing.

Almost a third of all homemakers in the population had benefited from classes and a television program on buying children's clothing and shoes. Three-fourths had talked with other adults about these problems.

Women had learned how to use the sewing machines more effectively; select more satisfactory fabrics; alter patterns; and make clothing for boys and girls and for themselves.

Mail as the Only Source of Information

Almost half of the women who had seen or heard about the four food groups said the mailed pieces were their only source of information, and more than half had a *Food for Fitness Guide* in their possession when interviewed. From 49 to 72 percent of them named one to three of the food groups, and 42 percent named all four. Most of the homemakers had received and read information on weight control and family health.

Fifteen percent of all homemakers in both areas said mailed information was their only source of information.

Relative Effectiveness of Methods in 1964

The major objective of this project was to determine methods which most effectively brought change in knowledge, skills and attitudes of Mexican-Americans and to identify cultural traits, some of which might be limiting factors in disseminating an educational program to the population.

Responses to questions in the 1964 Evaluation Study showed that a letter, with enclosures mailed to homemakers by name under postage stamp, was unquestionably the most influential method used during this 18-month period in Area I. Few homemakers of this culture and of low-income families receive direct mail. Consequently, it brought information from an outside influence directly into the home. In three subjects tested in foods and nutrition, the letter was higher by 46, 75 and 80 percents than the next high method as the recognized source of information. For the fourth subject, television was only 1 percent above the letter. For practically all subjects presented, the letter took precedence as a source of information, followed by television, classes and newspapers. Homemakers in each of the age and educational levels and income classes were reached by these methods. Friends and neighbors did not extend information to any homemaker who had never attended school and who had below $1,500 income. Also, none were provided information by children, but the letter reached some of them. In Area II, where the program had only an indirect influence, television was the outstanding source of information for homemakers. Newspapers and radio were the second and third most effective methods. Letters and classes both influenced homemakers in Area II, although neither method was extended to homemakers without a direct request for letters or attendance in classes held for Area I homemakers. Consequently, the radio, friends, neighbors and adult relatives played an important role in disseminating information in this area. Posters were effective for subjects when they were effectively displayed.

For this cultural group of low-income families, it was important to stress that all methods and combinations of methods used were necessary to reach a high proportion of the population.

Home visits during this period were extremely important. They created awareness of the educational program and fostered confidence in the home demonstration agent.

TRAINING OF EXTENSION AGENTS OF RESULTS

Information obtained in the 1964 Evaluation Study was used to train approximately 200 Extension workers from the state staff and agents from 92 counties with large Mexican-American populations. (See Appendix 3 for conference program.) The conferences included a presentation of the findings from the El Paso Special Project, information to expand understanding and appreciation of the Mexican-American subculture and information designed to increase awareness of the cultural values of this population in developing and conducting educational programs.

One year after the in-service training conferences, a questionnaire was sent to participants from counties to ascertain how effective the training had been. Responses from 86 counties varied greatly. The Mexican-American population comprised 2.5 percent to 77.6 percent of the total population in these counties. Prior to the training, programs which included this population were well under way in some counties while little had been done to involve them in others. Evaluation reports indicated that many county Extension agents had been motivated by the training to move toward more intensive and extensive educational programs. Reports also indicated a wide variation in the degree of acculturation in counties to the United States. The number of groups formed to reach Mexican-Americans had increased by more than 300 during the year and the number of individuals reached by more than 6,000. In the judgment of county agents, circular letters and leader training were considered "very effective" in reaching this population.

Agents indicated that workshops and short courses, personal instruction, bulletin distribution and other handouts and regular Extension organizations had been effective. Agents had worked with many other agencies and groups toward improved educational advancement of the population. Teaching plans prepared by specialists for the El Paso Project had been used in many counties. Foods and nutrition plans had been used 240 times and reached almost 4,000 individuals.

TERMINAL EVALUATION OF 1968

Situation

Between April 1964 and January 1968, economic and social changes had taken place which significantly altered the proportion of private and public housing dwellings within and between the two areas. Since family situations and homemaker characteristics differed between the two types of dwellings, this change also altered the degree of effectiveness of methods in the areas.

Relocation of the Mexico-United States International Boundary decreased private residences in Area II and new buildings increased them in Area I. Public housing units remained the same throughout. A long and damaging copper industry strike, possible loss of jobs by civilians at military installations in the interest of government economy, possibilities of the closing of the border to Mexican Nationals employed in the United States and other factors contributed to disorganization and intensified the distress of many individuals.

During this period, poverty conditions had intensified for a high proportion of families in the project area despite wide publicity concerning the War on Poverty to alleviate their circumstances.

Between 1962 and 1968, average family size dropped from 5.22 to 5 persons. The proportion of families with children dropped from 89 to approximately 80 percent, and the average number of children in these families decreased slightly. However, the proportion of children in families relative to the kind of housing was reversed. Families in private dwellings in Area I had a slightly higher average number of children than did those in public housing units. The reverse was true in 1962.

The population change of great significance was the increase in the number and age of "other adults" in households relative to household heads. These persons increased from 10 to 21 percent of the adult population in six and one-half years, and the greatest increase was in private dwellings in Area I. In 1968, 64 percent of the "other adults" were under 30 years of age and 16 percent of these were under 19 years. All indications were that these young adults were the 15- to 19-year-old children in these households six years earlier. Few held jobs or in any way contributed significantly to family income. Work opportunities were not available, and these young people had not been able to establish their own homes. The high number of families with children will provide a continuing stream of youth moving into adult status to join or replace "other adults" in families. Unless these young people can become self-supporting, family situations will become intolerable.

The educational levels of male household heads and homemakers had changed little during this time span. In Area I in which approximately three-fourths of the families had equity in property and whose holdings were not disturbed by the boundary change, more male heads and homemakers had moved into the 40 years and over age level. In Area II there were 19 percent more male heads under 40 years than in Area I.

Households without male heads increased from 19 to 25 percent, which is the same proportion shown in the 1960 Census for families in the United States with Spanish surnames. Doubtless, some of this decline results from the relatively high death rate of Mexican-Americans at an early age since, on the average, this population is aging.

Incomes for the year 1967 varied slightly from those of 1962 for combined areas. The average family income increased from $2,770 to $2,891 and per capita income increased from $525 to $578 for families with incomes of $1,000 to $4,999. Per capita incomes ranged from $466 to $525 between areas and within areas in both types of housing for all families with incomes of $3,500 and less in 1967.

Average earnings of male household heads decreased because of a decrease in households with male heads; an increase in male heads on retirement or pension funds; and a downgrading of jobs held by male heads.

During this period, the Consumer Price Index rose almost 13 points for all goods and services. It would have been necessary for per capita incomes to have risen 12.7 percent or to $592 for goods and services alone with no allowance for increased taxes for families to have the *same* spending power on the average for the year 1967 as for 1962. Families with above-average costs for home ownership, medical expenses, food, education and recreation of children suffered the greatest deprivation. However, inflation forced all families into a deepening depression, although some families were much more disadvantaged than others.

The food situation of families continued to deteriorate through the period of the project. The quantity of milk purchased per person remained practically the same. Food expenditure per week of families changed little while the food price index rose from 103.8 to 116.2. Except for the 14 percent of the families who received food stamps in the latter part of the period, quantities of food available for the dollars expended decreased. For the average-sized family of five who spent $20 per week for food, the per meal expenditure was 14 cents; for a family of nine, less than 11 cents per meal was available. More than a third of the families spent less than $20 per week for food.

The poverty level cannot be defined in a given number of dollars, family size, price levels and taxes.

Communication Equipment

Television and radios in combined areas were of extreme importance in making new knowledge available to this population and were available and in working order in 92 percent of the homes. Fifty-four percent were served by telephones. Almost twice as many homes in Area I were served by telephones as in Area II and 8 percent more had radios.

Selected Phases of the Extension Program

In an 18-month Extension program, an increase of 39 to 57 percent of the homemakers in the combined areas learned enough about the four food groups to enable them to name from one to three, and 29 percent more could name all four. This increase by 1968 had expanded from 51 to 76 percent for those who could name one to three and to 42 percent for those who could name all four. Homemakers said they had learned improved buying practices, storage and preparation of foods. Along with this, a very high proportion had put into practice improved methods of extermination and control of household pests and improved sanitation. While some improvement took place in purchase, storage and preparation, especially of foods such as soups and stews, no actual change took place in the basic character of diets. Breads and cereals continued to be the mainstay of diets for most families.

A declining purchasing power as a result of no improvement in incomes and a rising price level made it impossible for most of the homemakers to purchase protective foods for average-sized and larger families. Sufficient food of any quality was difficult or impossible to supply under the circumstances for a high proportion of these large families.

The use, source and cost of credit was a phase of the program which benefited many families. More than half of the homemakers said they had used information which improved their buying practices. Use of the layaway plan and installment buying predominated in the area.

Money management had helped about a third of the homemakers, and more than a fourth of them said they had been able to make some savings or hold back some funds for an emergency. Also, about a fourth received information on planning and performing household tasks which had been of help.

Buying of food preparation equipment, in extremely short supply in most homes, had been of importance to many homemakers able to make such purchases.

A program on laundering equipment and practices benefited very few homemakers.

Control of household pests was the joint effort of educational agencies and business concerns in the locality in 1967. Seventy-two percent of the homemakers in both areas had seen or heard these programs. Of these homemakers, only 3 and 2 percents in Areas I and II respectively had taken no action to rid homes of household pests. Methods to control household pests varied. Some had used commercial exterminators; others had used a wide variety of commercial products; and some of them said they had improved cleanliness in the home. Improved storage of food was presented during this same period, and 89 percent of the homemakers in Area I said they had made changes in their methods of storing food.

Clothing buying for adults and children benefited approximately a third of the total population, and clothing construction classes had enabled 16 percent to make clothing for themselves and other family members and to mend and alter the clothing on hand.

A few homemakers had learned enough to be able to assist neighbors and friends in simple clothing construction techniques.

Relative Effectiveness of Methods in 1968

By 1968, letters with mailed literature and television were almost identical in effectiveness in reaching homemakers with information, and these two were closely followed by the newspaper. Mailed information reached 33 percent; television, 34 percent; and newspapers, 30 percent. Classes were next in importance, but reached only 12 percent of the women. To arrive at this conclusion, a weighted average was obtained for 17 subjects included in interviews.

Consideration of six subjects which had influenced 53 to 87 percent of the homemakers and the six methods most effective in reaching them indicated that television followed by newspapers and letters were the most influential methods. Radio and classes which were almost identical in influence were followed by home visits in Area I. Television, newspapers, classes, radio, home visits and letters, in order given, were effective in extending information to homemakers in Area II.

Classes stand apart from other methods in that demonstrations can be given and skills developed in face-to-face contact which cannot take place otherwise. A relatively low proportion of homemakers continued to attend classes during the latter period of the project. Possibly the deepening depression in which these homemakers found themselves brought about a shrinking away from social contacts, or their inability to utilize information obtained brought about decreased interest. Also, classes held in the public housing center for all homemakers in Area I may not have attracted homemakers from private residences. In any case, to the women who did attend, classes were very important as a source of knowledge; as an opportunity to develop skills in food preparation and clothing construction; and as a means of encouraging neighborly association and of extending meager social contacts. Isolation of homemakers with little formal education and very low incomes was a major barrier to educational advancement.

Awareness of the Extension Service As the Source of Information

Up to 30 percent of all homemakers recognized the home demonstration agent as the source of information for selected subjects. Over the period of the project, some homemakers learned to call the county Extension office for information. One characteristic of low-income homemakers interfered materially with efforts to find out how and from whom information had been obtained. Particularly for subjects which these women seemed to believe they should know about, they tended to respond with "myself" to questions concerning methods and sources of knowledge. There was reluctance to say they did not know, and they usually said that they did not remember foods subjects in particular.

Local Leadership Development

Except for a few homemakers, leadership development in the community was not recognized by most of the homemakers. Information passed on was recognized as that from neighbors and friends rather than from "helper" as local leaders were designated in the project.

Some leadership developed to the point that simple foods and clothing construction techniques were taught by a limited number of helpers. One homemaker was serving as a 4-H leader for a small group of girls after the project closed; however, it cannot be said that local leadership was advanced beyond an elementary level over this period.

Awareness of Community Facilities

Some family members from 44 to 60 percent of the households utilized clinics, libraries, parks and the recreation center in the area. Only 13 percent of the families had used none of the facilities available.

Awareness of Other Community Programs

Almost three-fourths of the homemakers had heard about Project Bravo,[1] and a fourth of them were acquainted with the League of United Latin-American Citizens. Almost a fifth of them knew that the Office of Economic Opportunity provided information on job opportunities, but three-fourths of them did not know that information was available to them nor where they could get it.

In six years, erosion of income and opportunity for advancement had negated much of the initiative needed to seek and find a way out of an intolerable situation, and the absolute number of people involved limited progress. The armed services offered opportunity to some young people, but few, if any, other doors to opportunities seemed to be open.

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[1] Project Bravo is a Community Action Project in El Paso, funded by the Office of Economic Opportunity.

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Extending Cooperative Extension Education to Mexican-American Families Program, Methods and Evaluation

A Report of a Research Study
El Paso, Texas
1962 - 1967

Extending
Cooperative Extension Education
to
Mexican-American Families
Program, Methods and Evaluation

Daniel C. Pfannstiel and
Starley M. Hunter[1]

Section 1. Background

NEED FOR THE RESEARCH PROJECT

The enabling legislation for the Cooperative Extension Service, the 1914 Smith-Lever Act, charges the organization with the responsibility for ". . . diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same . . ."[2] The Agricultural Extension Service of Texas A&M University continuously strives to meet this legally assigned responsibility. Every effort is made to extend the educational programs it conducts to all people of the state who stand to benefit from them.

Making educational services equally available to members of all ethnic groups has proved difficult because Texas continues to attract peoples of many different and diverse origins. Following the early permanent settlement by predominately Anglo-American groups from the eastern and southeastern states, the state has experienced large influxes of people from Germany, Poland, Czechoslovakia, Italy, Scandinavia and other parts of Europe. Texas also has a large Negro population. The single largest group which today is still identified as the distinct ethnic unit in this state is the Mexican-American population, the origin of which primarily traces to comparatively recent immigrations from Mexico. This is the only distinct population group remaining in Texas which continues to grow significantly as a consequence of an inward migration from a different country and culture.

As a whole, the Texas Agricultural Extension Service has been successful in working with families from all of these many different ethnic backgrounds. The Service has been able to reach effectively and adequately the various populations having a European heritage with Extension educational programs despite the fact that many groups originally settled in contiguous communities, sometimes encompassing geographical areas composed of several counties. Furthermore, Europeans — the most of whom arrived several generations ago — have almost completely integrated themselves, linguistically, socially and economically, into the general Anglo-American culture of the state. Only rarely do special efforts still have to be made to reach these peoples as separate groups today.

Providing adequate educational service to the Mexican-American population has been recognized as a problem. Although efforts have been made to make Extension educational services as much available to this ethnic group as to any other group, empirical evidence indicates that programs have failed to make sufficient and adequate impact on them in the past. One significant barrier has been language. Much of the Mexican-American population has immigrated to Texas in relatively recent periods; consequently, many have limited faculty with the English language. Although the Extension Service has translated many of its publications, radio scripts and other materials into Spanish for use in media communication efforts, the results in terms of acceptance of practices have been disappointing.

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[1] Respectively, Assistant Director and Extension Studies Specialist, Agricultural Extension Service, Texas A&M University. During the conduct of this project, Dr. Hunter was Extension Research Specialist, Division of Extension Research and Training, Federal Extension Service, U.S. Department of Agriculture.

[2] U.S. Congress, *Public Law No. 83,* 83d Congress, 1st Session, approved June 26, 1953, Section 1.

Another barrier to getting the population to use research information is economic. Income of members of this population as a whole is quite low. Lack of sufficient economic resources often precludes the acceptance of a recommended practice even if the practice is recognized by the individual as desirable.

The greatest single barrier to effective communication with Mexican-American families is cultural. The value systems of these families vary significantly from the value system of the dominant majority in the state. Presently used Extension techniques and methods often have been geared more to the value systems of the majority. Thus, techniques that are useful in working with the majority may be ineffective for working with Mexican-American families.

To serve this population more effectively, special techniques and methods with proved effectiveness in successfully disseminating the educational content of Extension programs to this particular population needed to be identified and applied. Although some attention had been given to the problem, little careful testing of these methods to determine objectively the results obtained by their application had been done. This was recognized as needed under carefully controlled conditions. A proposal for a special project was developed and application was made for an allocation of funds under the Special Needs provisions of the Smith-Lever Act through the Federal Extension Service of the U.S. Department of Agriculture. This request for special funds was approved in 1961. Specific purposes of the project were to develop and establish an action research project designed to determine the efficacy of different methods and techniques as a means for reaching families of the Mexican-American population group with Extension educational programs.

Texas has a large Mexican-American population. In 1960 the total Spanish-surname population, which is the best available means for estimating the Mexican-American population from the Census data, was 1,417,810, which comprised 14.8 percent of the total poulation of the state. (This compared to 1950's population of 1,033,768 or 13.4 percent of the total population.) In Texas, the Mexican-American population is largely urban, more so than the population as a whole. Of this population 78.6 percent was urban in 1960, compared to 73.3 percent for the total population.

Of Texas' 254 counties, about half have a sizeable Mexican-American population. According to the 1960 Census, 124 counties had a Spanish-surname population comprising at least 10 percent of the total population or containing in excess of 2,500 people in this category. Some counties in proximity to the Mexican border have an excess of 90 percent of the total population having Spanish surnames. Some of the largest cities have considerable Mexican-American population. San Antonio in 1960 had 35.3 percent and El Paso, 45.9 percent. Although a lower total percentage reside in Houston, Dallas, Fort Worth and some of the other larger cities, there are still large numbers of people with Spanish surnames in these cities which are further removed from the Mexican border. Although the population is concentrated in the south and southwest portions of Texas, the population is gradually moving northward and eastward.

It was anticipated that the findings of the research project would be useful not only to Texas but also to the other four southwestern states (New Mexico, Colorado, Arizona and California) which have large Mexican-American populations. Also, it was recognized that the findings would be of value to many other states attempting to develop educational programs for farm migratory workers and their families which consist mainly of members of this population.

The project, as envisioned initially, primarily had a cross-cultural focus although it soon became evident that a low-income dimension was also involved. Many of the findings that became available in the earlier stages of the conduct of the project were useful in developing programs and selecting appropriate methods for low-income audiences generally.

OBJECTIVENESS OF THE PROJECT

Specific purpose of the project was to identify, by means of a controlled action research effort, the most effective methods for reaching Mexican-American families with the content of Extension educational programs.

In undertaking the project, a stated purpose was to test many different methods, both traditional and new. Methods for testing included both individual and group methods, such as individual home visits, group meetings, workshops, method demonstrations, result demonstrations, leadership development, publications, radio, television and newspaper. It was envisioned that these would be tested individually and together, in the latter case to determine the supportive or contributive role of methods when used together.

The underlying objective to identifying the specific methods effective for reaching the group was to have those methods employed by Extension staff personnel in all counties having a Mexican-American population. An integral part of the project was the pledge to disseminate whatever results were obtained to Extension staff members and to interested educators of other agencies and organizations.

The subject-matter content of the educational programs conducted was regarded as secondary to the main purposes of the project. The content disseminated was in foods and nutrition, clothing, home management, consumer education and family life education.

DEFINITIONS OF TERMS

THE RESEARCH PROJECT. This term was used to designate the total six and one-half years' undertaking (mid-1961 through December 1967) designed to meet the objectives of determining the most effective teaching methods for reaching Mexican-American families with Cooperative Extension educational programs. It involved the actual conduct of carefully designed educational programs with a designated audience employing a variety of teaching methods. It also involved the conduct of three surveys to ascertain the changes that had taken place within the target audience in terms of skills, knowledge and attitudes and to determine what methods brought about these changes. In all cases, comparisons were made with a contiguously located audience to which no special efforts or programs were directed. The research project was made possible by an allocation of funds made to the Texas Agricultural Extension Service by the Federal Extension Service of the U.S. Department of Agriculture under the Special Needs provisions of the Smith-Lever Act.

The project was initially undertaken in El Paso County, Texas, and later was focused on a specific area within the City of El Paso.

SITUATION (BENCH-MARK) STUDY. This study was conducted in September 1962 to obtain information on family characteristics and situations and other selected information to provide program-development guidance. This study was made prior to the launching of a special educational effort to serve as a base for measuring subsequent change.

THE EVALUATION STUDY. This study was made in April 1964 to ascertain changes in behavior among the people and the relative effectiveness of methods after the conduct of an 18-month intensive educational effort.

TERMINAL EVALUATION. This study was made in January 1968 subsequent to the official termination of the research project to ascertain additional changes in behavior and to validate findings of the 1964 Evaluation Study.

MEXICAN-AMERICAN. This term was used to identify the bicultural segment of the total state population. In Census data, this population is included in the subcategory of white population; therefore, no official count of this population is available. Operationally, the Spanish-surname population was used to approximate the number of Mexican-Americans.

FAMILY AND/OR HOUSEHOLD. For purposes of the study, "family" and "household" were used interchangeably. Both pertained to a situation where a number of people lived together in one facility as a unit and shared a common income. In most cases, this was the nuclear family (parents and children), but it also included in some cases members of the extended family.

HOUSEHOLD HEAD. The male head of the family was considered the household head. Where no adult male was present, the adult female present was considered to be the household head.

HOMEMAKER. The adult female in the household responsible for homemaking was designated as the "homemaker." This situation accounted for 99 percent of the households surveyed. In the 1 percent of the households not having an adult female present, the male head responded as the homemaker.

PRIVATE DWELLINGS. A few private dwellings were composed of from two to four housing units under one roof. Each of these units was considered a private dwelling.

PUBLIC HOUSING. These were composed of a complex of apartment buildings.

BASIC PLANNING FOR THE PROJECT

For some time, information on how to reach Mexican-American families effectively with Extension educational programs had been recognized as inadequate. In 1961, staff members of the Texas Agricultural Extension Service concluded that a systematic approach was necessary to obtain more definitive information. This led to the development of a proposal to the Federal Extension Service of the U.S. Department of Agriculture for a grant of Special Needs Funds to finance the conduct of a carefully designed long-range research project directed toward obtaining the required information. The long-range nature of the project was emphasized since it was recognized that the kinds of fundamental changes in behavior that needed to be brought about to test the comparative efficacy of particular methods could not be accomplished during a short period. Although Special Needs grants can be committed only on an annual basis, officials of the Federal Extension Service indicated that priority consideration would be given to renewing the project each year because of its long-range aspects. It was anticipated that about a seven-year period would be required.

After the approval of the project, more specific plans were developed for its implementation. The administrative responsibility for the project was assigned to an Assistant Director. Many staff members were involved in the basic planning. In fact, a great deal of planning was done thoughout the conduct of the project. Although numerous staff members were involved on an as-needed basis, the core group, besides the responsible Assistant Director, included the Assistant Director for Home Economics, the State Home Demonstration Agent, the District Home Demonstration Agent supervising the Project Worker, the El Paso County Home Demonstration Agent, the Project Worker (Associate County Home Demonstration Agent) and the State Home Economics Specialists who were specifically assigned to support the project. The latter included specialists in foods and nutrition, clothing, home management and family life education. Another continuing member of the basic planning group was the Extension Research Specialist from the Federal Extension Service who was assigned by that organization to support the project on a continuing basis.

Specific, detailed planning took place prior to each major phase of development of the project. Many staff members were involved, and a plan of work and calendar of events were prepared for each major phase which indicated what would be done, by whom and when. Particular emphasis was given to specific methods to be used so that their comparative effectiveness could be ascertained. (See Appendix 1 for sample of one of the detailed plans of work and calendar of events.) These documents were circulated to all staff members concerned.

As specific program thrusts to be made were identified, the supporting state home economics subject-matter specialists developed, in consultation with the project worker, comprehensive teaching plans. These plans later were made available by the specialists to Extension agents in other counties. Thus, considerable additional utilization of these teaching plans was effected. The specialists also developed many other materials in support of the project.

The basic planning group also developed the instruments which were used in the three studies made by surveying the focal population group.

The first project worker was employed in July 1961. She received six week of intensive training and orientation prior to reporting to her assignment in El Paso County. Her first year was spent in exploratory efforts in both rural and urban areas of the county. This experience pointed to the need to focus and concentrate the effort on a more specific audience if any measurable impact was to be obtained by which methods utilized could be evaluated.

As a result, the planning group decided to select one specific area of the City of El Paso and to concentrate all efforts there. In September 1962, the Situation Study was conducted of the selected project area and of a contiguous area which was to serve throughout the project as the control group.

The data obtained from this study were used by the planning group to identify needs and to plan an intensive educational program to meet those needs. Also the study gave information to what methods of communication were presently being used by the homemakers of the area for family living information.

In April 1964, after an 18-month intensive educational effort, the Evaluation Study was made to determine what changes had taken place and what methods were most responsible.

In April 1964, the second project worker was assigned following the resignation of the first. Both individuals were fluent in both English and Spanish. The second staff member assigned remained with the project until its termination.

From 1964 until the termination of the project, efforts were directed toward further testing the methods indicated as the most promising by the Evaluation Study. Also, increased efforts were placed on identifying and developing leaders within the target audience to determine the effectiveness of this particular approach.

The special project was conducted separately from the ongoing Extension educational program in El Paso County but in full knowledge of it.

Plans were made early by the planning group to convey any results of the project to other Extension personnel in the state who would be in a position to make use of the findings. In-service training meetings were held in 1965 following the analysis of the data of the 1964 Evaluation Study which revealed definite information about the comparative effectiveness of methods used. The training effort is more fully discussed in Section 6 of this report.

The project worker kept a daily diary of her activities. This record was useful in tracing through the series of events associated with particular activities that the studies later showed were particularly productive in bringing about changes in behavior.

Among the methods selected for testing were: individual contacts (primarily home visits); group methods (workshops, clinics, classes); mass media (television, circular letters, posters, radio, newspapers).

METHODOLOGY FOR THE SITUATION, EVALUATION AND TERMINAL EVALUATION STUDIES

The amount of funds available for conduct of the project was sufficient only to employ one full-time professional staff member. This meant that the project had to be confined to one specific locality. El Paso County was selected for a number of reasons, foremost among which was the special interest which had been manifested by the El Paso County Program Building Committee in attempting to reach Mexican-American families in that county. The leadership there was anxious to cooperate with the project to see what could be learned as to the most effective methods for reaching this population. It became apparent early in the conduct of the project that the work needed to be concentrated or at least limited to a defined neighborhood or area wherein there was a reasonable chance that impact could be measured. To work in the entire county or city would mean that any impact probably would be so diffused as to be statistically undeterminable.

In selecting an area, effort was made to get a somewhat representative one. It was felt that the conditions could be measured and controlled better in an urban rather than a rural setting. City officials of El Paso, including officials of the City Planning Commission, were helpful in identifying an appropriate area. The area selected for the project was one that had several fairly well defined boundaries.

The total area selected contained some 1,700 to 1,800 families. Subsequent to the identification of the area, it was divided into two subareas, Area I and Area II. All teaching efforts were aimed at the audience residing in Area I and none specifically to the families in Area II. Although it was recognized that Area II, being contiguous to Area I might result in some "spillover" of information into that area, it was felt necessary to locate these areas together to insure that one population was involved instead of two. Otherwise, any differences achieved could be attributed to inherent differences in the population.

Figure 1, a sketch map of the total area involved, shows the two parts of it which were delineated as Area I and Area II. Also shown is the 1966 relocation of the International Boundary. As can be seen, this relocation directly affected only Area II.

Both Areas I and II had within them a public housing development. In each area, roughly 40 percent of the families lived in public housing and the remaining 60 percent in private dwellings prior to 1966.

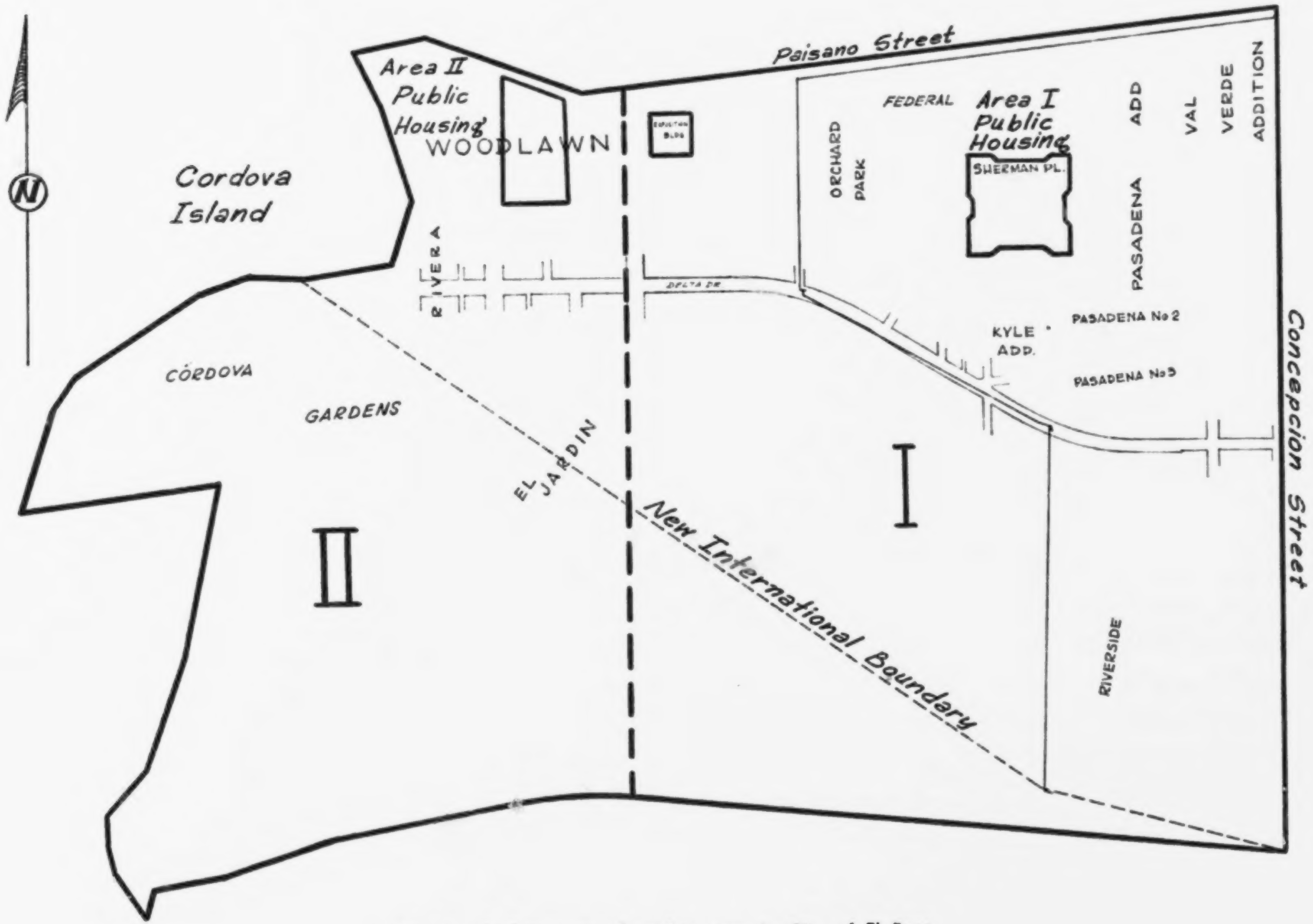
Paisano Street
Area II Public Housing
WOODLAWN
EXPOSITION BLDG
FEDERAL
Area I Public Housing
SHERMAN PL.
ORCHARD PARK
PASADENA ADD
VAL VERDE ADDITION
N
Cordova Island
RIVERA
DELTA DR
KYLE ADD.
PASADENA No 2
PASADENA No 3
CORDOVA
GARDENS
EL JARDIN
I
II
New International Boundary
Concepcion Street
RIVERSIDE

Fig. 1. Outline map of project area in City of El Paso.

The overall plan was to have two dimensions available for measurements: a time dimension (before and after the conduct of the special educational effort) and a spatial one (Area I and Area II). The population of Area I was considered as the experimental group, and the population of Area II, to which no specific educational efforts were directed, was considered the control group.

Before efforts were undertaken to carry out an educational program to test methods, two facts were needed: the characteristics of the population with which the work would be carried out and what home economics practices were being utilized by it. To obtain this information, the first survey was made in 1962. This study is referred to as the Situation (Bench-Mark) study in this report. One encouraging and significant discovery of the 1962 survey was that both Area I and Area II contained the same population — not two different ones. There were no significant differences in such characteristics as educational background, age, size of family, etc., between Areas I and II. This was regarded as evidence that the sampling techniques had been sound.

In April 1964, the second survey was conducted and referred to as the Evaluation Study. One additional survey was made in January 1968, following official termination of the project in December 1967. The total period of operation of the project was approximately six and one-half years, from mid-1961 through December 1967.

Survey instruments used in each of the three surveys were developed for the purpose of obtaining certain demographic characteristics of the population, such as family size and composition, age, education, housing, facilities and unemployment as well as obtaining information on homemaker knowledge and use of basic homemaking practices and procedures. Also in the 1964 and 1968 studies, the survey instruments[3] were structured to obtain data on the sources of information that the homemakers obtained. In each case, the survey instruments were prepared in both English and Spanish — the interviewer using the language with which the individual appeared to be most comfortable.

In each one of the three studies, women with a bilingual competency were employed to interview homemakers included in the sample. The interviewers were trained and supervised by a team from the Federal Extension Service composed of the Extension Research Specialist, coauthor of this report, and Grace E. Larson, Statistical Assistant. This team also edited the instruments as they were completed and accomplished the data analysis. Data processing equipment in both the U.S. Department of Agriculture and Texas A&M University was utilized. The primary statistical treatment utilized was the test of significance of differences of percentages utilizing table formulae developed by Davies.[4] Tests for significance at both the 5 and 1 percent levels can be obtained simultaneously from the tables developed by Davies.

In each study, a 20 percent random sample of households in both Areas I and II was used. The samples were drawn according to procedures developed by the Agricultural Research Service, U.S. Department of Agriculture.

During the 1964 Evaluation Study, nine respondents in the sample were selected for a second interview designed to assemble detailed data for use as case studies. Three were selected from the very lowest income categories, three from moderate income categories and three from the higher income categories as found in the study population. Detailed information on family-spending patterns was obtained to construct these case studies. These case studies were exceptionally useful in discussing problems of these families in the in-service training session held in 1965. Sample case studies appear in the Appendix.

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[3] Copies of the actual schedules used in each of the three surveys are not in this report because of their bulk. Copies may be obtained on a loan basis by writing the Agricultural Extension Service, Texas A&M University, College Station, Texas 77843.

[4] Washington Agricultural Experiment Station, Institute of Agricultural Sciences, Department of Rural Sociology, *Tables Showing Significance of Differences Between Percentages and Between Means*, by Vernon Davies, Stations Circular 151, Revised (Pullman, Washington: Washington Agricultural Experiment Stations, March, 1954).

Section 2. Situation (Bench-Mark) Study
September 1962

FAMILY SIZE AND COMPOSITION

The average size of Mexican-American families is above the average of both Negro and white families in the United States. In the area surveyed, family size was higher than normal. The 300 families in the sample had 1,566 persons — an average of 5.22 persons per household. The range was from 1 to 13 persons and 89 percent of them had children. Table 1. There was a total of 965 children, an average of 3.60 children per household with children. In addition, there were 62 "other adults," who were married children and their spouses of any age and persons 21 years of age and over, *not* household heads. Most of the "other adults" were related to the families. They constituted 10.14 percent of the adult population and 3.95 percent of the total population. Sixty-two percent of the population were children, while 34 percent of the population were male and female household heads responsible for the support of these children, themselves and a portion of the "other adults" living in the households. Thus, dependents weighed heavily on wage earners in these Mexican-American families.

Table 1. Families of given size and total persons

Family size	Number of households		Total number of persons	
Persons	No.	%	No.	%
Total	300	100	1566	100
1	4	1	4	1
2 - 3	75	25	198	13
4 - 5	107	36	487	31
6 - 7	66	22	425	27
8 - 9	30	10	253	16
10 - 11	14	5	145	9
12 - 13	4	1	54	3

Table 2. Percentage of households with children in various age groups

Area	Years of age			
	Under 5	5-9	10-14	15-19
	%	%	%	%
Study area	53	60	56	41
El Paso[1]	16	13	10	3
State of Texas[2]	13	11	10	7

[1] U.S. Department of Commerce, Bureau of the Census, **United States Census of Population—1960,** Vol. 1, 45D: **Texas** (Washington, D.C.: Government Printing Office, 1962), Table 106, p. 747. [Figures computed from this publication.]
[2] **Ibid.,** p. 740.

Families with Children in Various Age Groups

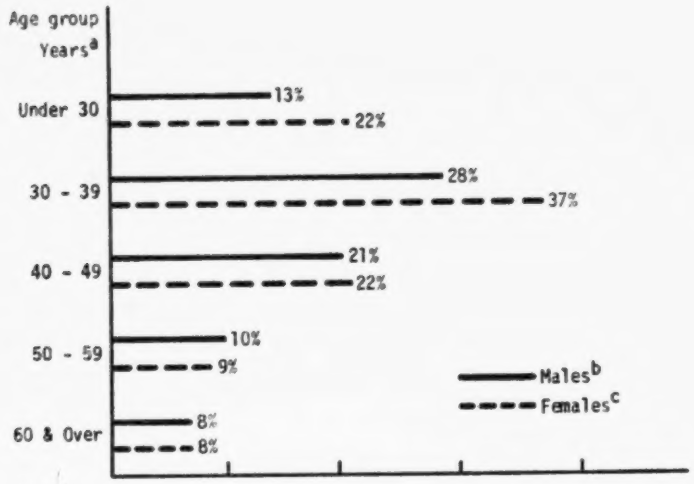
A comparison of the percent of households with children in various age groups in the study area, in the City of El Paso and in the State of Texas is shown in Table 2.

In some families one or both grandparents were caring for children; 11 homemakers 60 years of age and over had a total of 16 children in their homes ranging in age from under 5 through 19 years. Several households were composed of the primary family plus married children and their children. The sample also contained homemakers under 24 years of age with children in the household in every age group from under 5 to 21 years. The older children were designated most often as brothers or sisters of the husband or wife. Table 3.

Table 3. Number and percentage of families with children in various age groups by age of homemaker

Age of homemaker	Total		Age group					
	No.	%	Under 5	5-9	10-14	15-19	20-21	No child
Total records	300	100	100	100	100	100	100	100
Under 25	30	10	18	4	1	2	10	6
25 - 29	36	12	20	18	5	1	5	3
30 - 39	112	37	49	54	55	42	30	6
40 - 49	65	22	9	19	28	32	35	22
50 - 59	27	9	3	3	8	15	20	16
60 and over	25	8	1	2	2	7		44
All other[1]	5	2			1	1		3

[1] Male homemaker—3; don't know—1; and no response—1.



[a]Don't know and no response 1 percent.

[b]No male head - 19 percent.

[c]No homemaker - 1 percent.

Fig. 2. Percentage of households with male heads and homemakers in various age groups

Marital Status

One in every five households constituted broken homes with no husband present in 19 percent and no wife present in 1 percent.

AGE

In this population, slightly more than four in every five homemakers were under 50 years of age. Figure 2. Less than one in ten was in each of the age groups 50-59 and 60 years and over. Table 4.

Only 18 percent of the male household heads and 17 percent of the homemakers in the area were 50 years of age or older. This is a sharp contrast relative to the country as a whole; however, findings for the area are substantiated by data derived from the 1960 Census which showed a declining proportion of Spanish-Americans relative to white and Negro populations at five-year intervals from 45 to 75 years of age and over.[3]

Table 4. Number and percentage of male household heads and homemakers in various age groups

Age group—years	Male household head		Homemaker	
	Number	Percent	Number	Percent
Total number of records	241	100	295	100
Under 25	18	8	30	10
25 - 29	22	9	36	12
30 - 39	84	35	112	37
40 - 49	64	26	65	22
50 - 59	29	12	27	9
60 and over	24	10	25	8
Total records	300	100	300	100
Response to age	241	81	295	98
No response	1	[1]	2	1
None present	58	19	3	1

[1]Under one-half of 1 percent.

Table 5. Number and percentage of male heads and homemakers who had completed a given number of years in school

Years in school	Male		Female	
	Number	Percent	Number	Percent
Total number of records	226	100	292	100
0 - 4	59	26	93	32
5 - 6	47	21	58	20
7 - 8	50	22	58	20
1 - 3 high school	37	16	51	17
4 high school	26	12	31	11
1 - 3 college	5	2	1	[1]
4 college	2	1		
Total households	300	100	300	100
Responses to years	226	75	292	97
No response	5	2	5	2
Unknown by wife	11	4		
No male/female	58	19	3	1

[1]Less than one-half of 1 percent.

EDUCATION

Approximately half of the homemakers and male household heads had no schooling beyond the sixth grade. Almost a third of the homemakers and a fourth of the male heads had never gone to school or had not gone beyond the fourth grade. Table 5.

Forty-seven percent of the children from 8 through 20 years of age were retarded one or more grades in school or had dropped out of school. For this computation a child was not considered retarded who completed grade one at the age of 7, grade two at the age of 8 and so on through the 12 grades. Table 6.

HOUSING

Somewhat over two-fifths of the families in the area lived in apartments in two public housing developments and three-fifths lived in private residences. Of those in private dwellings, 77 percent owned outright or were paying on their homes. Thirty-six percent of the families owned their homes and 41 percent were making payments.

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[3]Raymond F. Clapp, "Spanish-Americans of the Southwest," *Welfare in Review*, IV, No. I (January, 1966), 1-12.

Table 6. Percentage of children of a given age and school grade completed

Grade Compl	Total No.	Total %	Age 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Total	609	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1	76	12	100	74	39	2	4								4		
2	71	11		26	42	33	13	9							4		
3	69	11			19	52	30		11	2	2						
4	63	10				13	42	42	17	8							
5	52	8					9	49	30	10	5	2	2				
6	47	7					2		32	36	9	4	2		4	8	10
7	47	7							10	30	41	10	5	5	4		
8	54	8								12	36	41	14	5	7	4	10
9	55	9								2	7	29	31	40	20	19	40
10	37	6										14	41	15	20	12	10
11	19	3											5	30	20	19	
12	17	3												5	17	38	10
College	2	[1]															20

[1]Less than one-half of 1 percent.

As income rose, the percentage of families in each income class who owned or were buying their homes rose irregularly. The income range of those owning or paying on homes was from 40 percent of the families with incomes under $1,500 to 77 percent of those with incomes of $5,000 and over. Table 7.

Mobility

Mobility of families was low except for those living in public housing. Mobility possibly was high for a few individuals because of persons living in private dwellings who were not of the primary family. However, mobility of those living in public housing was high for a segment of the population. A fourth of the renting population had lived in their dwellings one year or less and almost two-thirds had lived there three years or less. Table 8.

Repairing and remodeling of homes under way in the area at the time the study was made and the high rate of home ownership indicate a stable population living in private dwellings. Another factor that indicated stability was that more than three in every four families had lived six or more years in the dwellings they occupied when the interviews were conducted.

Table 7. Number and percentage of ownership or renting by income class

Ownership or rent	Total No.	Total %	Income class[1] Under $1,500	$1,500 to $2,499	$2,500 to $3,499	$3,500 to $4,999	$5,000 and over
Total	300	100	100	100	100	100	100
Renting	158	53	60	71	60	39	23
Payments	73	24	7	16	21	41	46
Own	64	21	33	11	18	17	31
Rent free	5	2		2	1	3	

[1]Don't know—4; no response—6.

Size of Houses

A tenth of these families had seven or more rooms of living space. Table 9. However,

Table 8. Number and percentage of years lived in dwelling, by ownership or renting

Ownership or rent	Total No.	Total %	Years[1] 1 or less %	2-3 %	4-5 %	6 or more %
Total	300	100	100	100	100	100
Renting	158	53	85	89	54	21
Payments	73	24	13	11	31	34
Own	64	21	2		11	43
Rent free	5	2			4	2

[1]No response—7.

Table 9. Number and percentage of families living in a given number of rooms

Number of rooms[1]	Families Number	Families Percent
Total number	300	100
One and two	6	2
Three and four	51	17
Five and six	213	71
Seven or more	29	10

[1]No response—1.

almost three-fourths lived in five or six small rooms. With an average family size of 5.22 persons, many families lived under crowded conditions and individuals had little or no privacy. More than a third of the families had six to ten or more members, with space extremely restricted.

FACILITIES, EQUIPMENT AND TRANSPORTATION

Households were well supplied with major facilities and equipment which generally are considered necessary for reasonably satisfactory living in our present economy. All of the families had electricity and more than 98 percent had mechanical refrigeration. One family used ice and four families had no refrigeration. Two families reported they used no heating fuel. Table 10.

The City of El Paso has an intracity bus system and a bus and streetcar system between El Paso and the contiguous City of Juarez, Mexico. However, since El Paso is one of the ten cities with the largest land area in the nation, lack of private transportation restricted activities of the 40 percent of the families who had neither car nor truck. Only 15 percent of the homemakers could drive, and some of these were young homemakers who were able to drive but the family had no car or truck.

Table 10. Number and percentage of families with selected items of equipment and facilities

Items	Number	Percent
Total number of records	300	100
Sink in kitchen	285	95
Running water in kitchen	291	97
Complete bathroom in working order	280	93
If "no bathroom" have outside private toilet	9	3
Vacuum cleaner	126	42
Electric iron (dry)	295	98
Steam iron	57	19
Either electric or steam iron	299	99
Home freezer	15	5
Refrigerator—electric or gas	295	98
Refrigerator—ice	1	[1]
Cooking stove—electric or gas	294	98
Air conditioner, evaporator or attic fan	181	60
Large floor fan	13	4
Heating fuel—electric or gas	289	96
Other heating fuel	9	3
Complete screening of house	273	91
Some screening	23	8
Owned automobile and/or truck	181	60
Homemakers who drive	45	15

[1] Less than one-half of 1 percent.

EMPLOYMENT AND OTHER SOURCES OF INCOME

Wage rates for both males and females were low for those working in such occupations as household workers, laborers and others with little job preparation. Female operatives were employed primarily by the garment industry. Many older workers with a low educational level employed by industry earned higher wages than younger workers with a higher educational level. Apparently, increased population over the years unaccompanied by proportional increase in job opportunities has limited the opportunities for the younger and better educated worker. Table 11.

Less than a fourth of the homemakers were employed outside the home. The high proportion of families with children (89 percent) and with children in several different age groups required mothers to stay at home to care for them.

Also, there were 65 children 18 through 20 years of age in these households. Twenty-eight percent were occupied and 72 percent were unemployed and beyond the normal secondary school age. Eighteen of these youth had completed 12 grades; 36 had completed from 9 through 11 grades; 9 had completed 6 through 8 grades; and one each had completed grades 1 and 2.

One youth was in the Air Force, two were in college and 17 were in service or clerical jobs.

Table 11. Number and percentage of male household heads and homemakers by occupation

Occupation	Male		Female	
	Number	Percent	Number	Percent
Responses to occupation	237	100	65	100
Waitress			4	6
Household worker			4	6
Laborer	58	27	13	20
Clerk and sales	29	14	16	25
Service worker	18	8		
Craftsman	55	26		
Operative	37	17	26	40
Foreman and manager	10	5		
All others	6	3	2	3
Responses to occupation	300	100	300	100
Employed	213	71	65	22
Unemployed	8	3		
Retired or pension	16	5		
No response	5	2	2	1
No male/female present	58	19	3	1
Housewife			230	76

Table 12. Family income

Income class	Families	
	Number	Percent
Total number of records	300	100
Less than $1,000	17	6
$1,000 - $1,499	25	8
$1,500 - $2,499	85	29
$2,500 - $3,499	67	22
$3,500 - $4,999	61	20
$5,000 and over	35	12
Don't know	4	1
No response	6	2

Only four other youth were employed and they were all 17 years of age. Three were employed in service jobs and had completed from 6 to 10 grades in school and one was in the Air Force.

The outlook of these young people for earning a living is bleak. Low educational levels, occupation of those working and lack of employed points to an uncertain and difficult future for them as well as their families.

Family Income

Incomes of almost two-thirds of the families in the area were under $3,500. Table 12. The average income of families with incomes between $1,000 and $4,999 was $2,770. The average family size for these income classes was 5.31 which provided a per capita income of approximately $525. This calculation was made at the midpoints of the four middle-income classes which account for almost 80 percent of the families. If 60 percent of this income was spent for food, it would allow an average per meal cost of 29 cents per person and $210 per person for all other family living costs. This would provide an extremely low level of living.

Contrary to the national situation, little if any relationship existed between family income and education, age or occupation of the male household head. Table 13. However, there was a relationship between income, the number of employed persons in the family and/or supplements to family income other than from employment of a household member. Table 14 and 15.

Male heads were between the ages of 30 and 49 in almost two-thirds of the households with incomes of $2,500 and over. Conversely, almost three-fourths of the families without male heads had incomes of less than $2,500 and more than half had less than $1,500. Thus, young families, elderly families and families without male household heads were bearing the heaviest brunt of poverty in this population group.

This statement requires some qualification because of family size. In every income class there were some families in every family-size category from one and two persons to nine and

Table 13. Number and percentage of male household heads in occupations by income class

	Total		Dollars[1]				
			Under 1500	1500-2499	2500-3499	3500-4999	5000 & over
Occupation	No.	%	%	%	%	%	%
Total responses	213	100	100	100	100	100	100
Laborer	58	27	33	41	38	11	9
Craftsman	55	26	50	16	21	37	31
Clerk and sales	29	14		12	14	14	16
Service	18	8	17	12	7	7	6
Operatives	37	17		16	16	23	16
Foreman-manager	10	5			4	4	19
All other	6	3		3		4	3
Total households	300	100	100	100	100	100	100
Employed	213	71	14	68	85	92	91
Unemployed	8	3	12	2			
Retired/pension	16	5	19	6	3	2	
No male head	58	19	53	24	12	3	9
No response	5	2	2			3	

[1] No response to occupation and/or income—5.

more. Table 16. The largest families interviewed numbered 13 persons. At the top income level, this would allow less than $500 per capita, and at the lowest level for a family of nine, it would allow under $200 per capita per year.

Supplements to Income of the Major Wage Earner

Thirty-nine percent of the families had incomes from more than one worker and/or supplemental income from a source other than current labor income. Fifty-eight percent of the

Table 14. Number and percentage of male household heads by age groups and income class

Age group—years	Total No.	Total %	Dollars: Under 1500 %	1500-2499 %	2500-3499 %	3500-4999 %	5000 & over %
Total responses	241	100	100	100	100	100	100
Under 25	18	8	10	17	5	3	
25 - 29	22	9	10	11	8	7	13
30 - 39	84	35	10	35	41	39	34
40 - 49	64	26	20	18	29	33	34
50 - 59	29	12	5	11	12	15	13
60 - 69	14	6	20	3	2	3	6
70 & over	10	4	25	5	3		
Total households	300	100	100	100	100	100	100
Male heads	241	80	48	76	88	97	91
No male head	58	19	52	24	12	3	9
No response	1	1					

Table 15. Number and percentage of male household heads who completed given grades in school by income class

Grades completed	Total No.	Total %	Dollars: Under 1500 %	1500-2499 %	2500-3499 %	3500-4999 %	5000 & over %
Total responses	226	100	100	100	100	100	100
0 - 4	59	26	40	27	25	19	23
5 - 6	47	21	30	19	15	24	26
7 - 8	50	22	15	15	26	28	23
1 - 3 high school	37	16	10	22	19	10	19
4 high school	26	12	5	15	11	14	6
1 - 3 college	5	2		2	4	3	
4 college	2	1				2	3
Total households	300	100	100	100	100	100	100
Responses to grade	226	75	48	69	79	95	88
Unknown by wife	11	4		5	8	2	
No male head	58	19	52	24	12	3	9
Other[1]	5	2		2	1		3

[1] No response to either or both income and educational level.

Table 16. Number and percentage of families of various sizes by income class[1]

No. of persons per family	No. of records No.	No. of records %	Income class—percent: Under $1,500	$1,500 to $2,499	$2,500 to $3,499	$3,500 to $4,999	$5,000 and over
Total number of records	300	100	100	100	100	100	100
1 - 2	31	10	29	9	5	8	6
3 - 4	96	32	31	38	31	27	23
5 - 6	96	32	21	29	40	34	34
7 - 8	46	16	14	16	12	13	26
9 and more	31	10	5	7	12	18	11

[1] Don't know—4; no response—6.

families lived on wages of one worker and 11 families (3 percent) reported some form of public assistance. No family with as much as $3,500 reported public assistance.

Fewer families with incomes of between $1,500 and $3,499 had income from sources other than the primary wage earner than did those with lower and higher incomes. Seventy-three percent (152) of the families in these two income brackets lived on the wages of one earner. Of these, 55 percent had children under 5 years; 60 percent had children from 5 to 9 years; 48 percent had children from 10 to 14 years; and 33 percent had children from 15 to 21 years in their households. Only 7 percent (10 families) had no children. Any improvement in living conditions for most of these children will depend on increased earnings of the male household head — mothers are too occupied with child care in most families to work away from home and most of the children are too young to enter the labor market. Figure 3.

Supplemental income was from a wide variety of sources. Some families received income from relatives who did not live in the household. Income from sons or husbands in the armed services, pensions, social security, alimony and disability compensation were among those given. However, the chief source of income supplement to that of the major wage earner was the employment of from one to four other family members. Many youth enter the labor market as soon as possible and this is a major deterrent to improvement of the educational level of this population group.

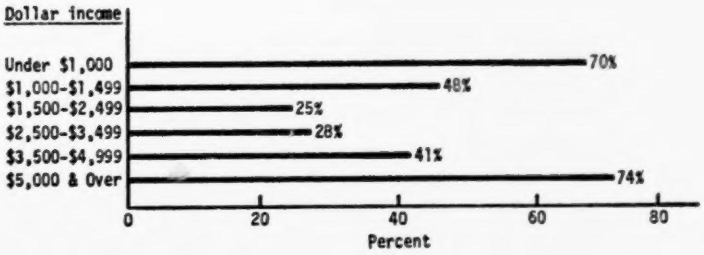

Fig. 3. Percentage of families by income class with more than one wage earner and/or supplemental income.

The difference in percentage of families with more than one worker and/or supplemental income between the two lowest and the two middle-income classes was statistically significant. This was true also between the two upper and the two middle-income classes. However, it was not true between the lowest and the highest income classes.

The percentage of families having children in various age groups by income class of the family are shown in Table 17.

SOURCE AND USE OF CREDIT

To obtain some knowledge of the credit practices of Mexican-American families, homemakers were asked: "Have you used the layaway plan in the past six months?" From 63 percent of the homemakers under 25 years to 51 percent of those ages 40 to 49 said they had used this plan for buying. For homemakers ages 50 to 59, the percentage dropped to 37 and for those 60 years and over, it dropped to slightly under 32 percent. A total of 54 percent of all families used this form of credit. Table 18.

Some families in each of the income classes used the layaway plan. As income increased, the percentage of families using this plan increased. The range was from 45 percent of those with incomes under $1,500 to 71 percent with incomes of $5,000 and over.

Table 17. Number and percentage of families with children in different age groups by income class

Income class	Total No.	Total %	Under 5	5-9	10-14	15-19	20-21	No children
Total number of records	300	100	100	100	100	100	100	100
Under $1,500	42	14	9	8	11	16	15	41
$1,500-$2,499	85	28	34	31	28	21	5	16
$2,500-$3,499	67	22	25	26	21	20	20	16
$3,500-$4,999	61	20	21	24	23	21	20	16
$5,000 & over	35	12	11	11	13	17	35	9
Don't know	4	1			1	3	5	
No response[1]	6	3			3	2		2

[1] Columns total over 100—most of the families had children in more than one age group.

Table 18. Number and percentage of families who used the layaway plan of purchase by age group of homemakers

Age group[1]	Total No.	Total %	Families[2] Yes No.	Yes %	No No.	No %
Total	300	100	161	54	130	43
Under 25	30	100	19	63	10	34
25 - 29	36	100	19	53	17	47
30 - 39	112	100	69	61	40	36
40 - 49	65	100	33	51	32	49
50 - 59	27	100	10	37	14	52
60 & over	25	100	8	32	15	60

[1] No response—and no homemaker—5.
[2] Don't know and no response—9.

Slightly more than three-fourths of all families were making time payments when the interviews were made. From 67 percent of the families in the lowest income class to 91 percent of those in the highest income class were making time payments.

Thirty-eight percent of all families had borrowed $10 or more during the year before the interviews. The percent borrowing moved from 5 in the lowest income class to 27 in the second, 31 in the third, 21 in the fourth and 14 in the highest income class. Also two families in which the income was not known were included. Percents were calculated on the 116 families who borrowed.

More than half of the families who borrowed obtained credit from loan companies, normally a high-cost source of credit. Families in the under $1,500 income class had loans from no source other than loan companies and "some person." Table 19.

Fifty-eight percent (173) of the homemakers said they had not borrowed in the past year; 2 gave no responses; and 9 said they did not know whether there had been a loan.

FOOD

Little has been documented concerning eating habits, meal patterns or nutritional knowledge of Mexican-American homemakers. To obtain information for program guidance, questions were asked concerning food-buying practices, family meals served the day before the interview, expenditures for food and the kinds and amounts of selected foods purchased the week before the interview. These questions were interspersed throughout the schedule to minimize the discomfort and emotional pressure a homemaker might feel relative to an inadequate food supply for her family because of insufficient income and/or knowledge.

Homemakers were asked how many times a day they prepared food in the home. Responses ranged from one to five with 66 percent of them preparing food twice a day, and the remainder was about equally divided between one, four and five times.

Six percent of the three- or four-person households prepared food five times a day, but as family size rose, the proportion increased and reached 16 percent of the households with nine or more persons. The number of times a day homemakers prepared meals did not relate to educational level. About two-thirds, at each grade level completed, prepared food three times

Table 19. Sources of credit by income class—number and percentage of families

Sources	Total No.	Total %	Income class[1] Under $1,500 %	$1,500 to $2,499 %	$2,500 to $3,499 %	$3,500 to $4,999 %	$5,000 and over %
Total	116	100	100	100	100	100	100
Some person	10	9	50	3	11		13
Bank	19	15		16	16	4	31
Loan company	60	52	50	53	50	67	31
Credit union	25	22		22	18	29	25
Other	3	2		6	3		

[1] Don't know and no response to income and/or source of credit—11 (duplicate—4).

Note: Columns do not total 100 percent because of don't know and no response and more than one source of credit for one family.

a day. Ninety percent of them said that most family members ate "almost all" of their meals at home. The 10 percent who did eat meals away from home were school children, factory workers and waitresses. There was little or no family "dining out."

Two-thirds of the homemakers said they decided what food to buy and more than a fourth said they and their husbands decided together. Husbands decided for only 3 percent, and children or others decided for an additional 3 percent of the households.

As age of the homemaker increased, the proportion of husbands and wives who shopped together decreased consistently. The range was from 50 percent of the homemakers under age 24 to 4 percent of those 60 years and over. In 1 percent of the households no one shopped — married children brought in food to these elderly residents.

One-fourth of the homemakers said they often bought food more than once a day. When asked to give the kind of market in which they preferred to shop, preferences were in the following order: supermarket, neighborhood store, drive-in and door-to-door vendor. The range in percentage was 92 down to 15.

It was known that families in the area purchased food in El Paso and in Juarez, Mexico, but the kinds and proportion purchased and the percent of the population making purchases were not known. Responses to the question, "Where do you buy most of the following foods?" indicated that more meat was bought in Juarez than any other kind of food. Table 20.

Forty percent of all families said they bought most of their meat in Juarez; 20 percent bought vegetables; but only 2 percent bought fruit. Twenty-six percent bought "other" commodities, such as coffee or sugar.

A lower proportion of families with under $1,500 incomes bought food in Juarez than did those with incomes above this level. However, as family size rose, the proportion who bought food in Juarez increased irregularly. The percentage who bought meat in Juarez ranged from 13 for one- and two-person households to 52 for families of nine or more.

Table 20. Place of food purchases

	Total		El Paso	Juarez	Both	Buy none
Kind of food	No.	%	%	%	%	%
Meat	300	100	52	40	7	
Vegetables	300	100	72	20	7	
Fruits	300	100	94	2	2	2
Soft drinks	300	100	71	15	2	12
Other[1]	300	100	55	26	19	

[1] Less than 1 percent.

Saturday was the favored day for food shopping but only slightly above Wednesday and Friday. Some homemakers said they shopped on Wednesday to get "double stamps."

"Convenience foods" had little place in diets of the Mexican-Americans. Almost three-fourths of the women said they "never or hardly ever" bought frozen foods, and almost half said the same concerning "ready-mix" breads and cakes. Only 7 percent said they "often" used frozen foods and 14 percent said the same concerning "ready-mix" breads and cakes. Others said they sometimes bought these products. Concerning soft drinks, over half of the homemakers said no one in the family drank any the day before the interview. A third said they drank 5 bottles or less; 8 percent said 5 to 10, and 2 percent said 15 or more.

At the time of the study, no donated foods were available, there was no food stamp plan in effect and there was no access to gift foods from farm areas. Consequently, food purchased was the only known supply available.

Homemakers were asked: "How much did you spend for food last week?" All food and only food was recorded in $5 intervals up to $30 and over. After careful study of the records, food expenditure seemed to be somewhat inflated, especially by a few homemakers in the lowest income class. Four homemakers (10 percent) of the lowest income class said they spent $30 or more for food the week before the interview. On an annual basis, this expenditure would exceed the total income. Either more was spent for food that week than usual or the food

Table 21. Number and percentage of families who spent given amounts for food the week before the interview by income class

Dollars spent for food[1]	Total		Income class[1]				
			Under $1,500	$1,500 to $2,499	$2,500 to $3,499	$3,500 to $4,999	$5,000 and over
	No.	%	%	%	%	%	%
Total records	300	100	100	100	100	100	100
$ 5	8	3	19				
$10	32	11	31	13	8	3	3
$15	61	20	19	24	30	12	14
$20	66	22	21	29	16	24	14
$25	57	19		21	21	26	20
$30 & over	73	24	10	13	24	35	49

[1]Don't know and no response—1 percent.

expenditure was overestimated. Table 21. However, one young homemaker with nine children, the youngest under 1 year of age, said she spent no more than $5 and bought only beans and 3 large cans of evaporated milk. In addition to this, 10 school lunches were recorded on the schedule. All responses to food buying and consumption by this family were consistent. There was no male head in the household. However, no other family of this size spent less than $15 for food. Ninety-one percent of the families of nine and over persons spent $20 or more for food the week before the interview. Table 22.

Cheese, meat, dried beans and coffee were commodities thought to be used extensively in diets of this population; consequently, a question was asked concerning quantitities usually purchased weekly. Table 23.

Almost a fourth of the families said they bought 5 to 6 pounds of meat per week. With an average family size of 5.22, this indicated meat consumption was 1 pound or less per person for these families. More than a fifth bought from less than 1 to 4 pounds of meat per week.

Another question was: "What foods did you prepare for your family yesterday?" Interviewers recorded what each homemaker said she had prepared (served) for each of the three normal meals a day and for additional meals and snacks. Drinks were not adequately reported in the responses and have been omitted from this summary. Most of the food reported fell into the categories listed in Tables 24 and 25. Some additional foods, such as vegetable salad and fruits other than citrus, were served, but the number of families serving such was negligible.

Fifty percent of the homemakers said they bought 6 pounds of meat or less per week; however, 69 per cent said they had served meat one or two times the day before. One homemaker said that only her husband had meat — his work was hard and he needed it the most.

Table 22. Number and percentage of families who spent given amounts for food the week before the interview by family size

Dollars spent for food[1]	Total		Family size				
			1-2	3-4	5-6	7-8	9 & over
	No.	%	%	%	%	%	%
Total records	300	100	100	100	100	100	100
$ 5	8	3	13	3			3
$10	32	11	29	12	10	4	
$15	61	20	23	32	21	2	6
$20	66	22	19	21	23	24	23
$25	57	19	13	17	24	22	13
$30 & over	73	24		13	22	48	55

[1]Don't know and no response—1 percent.

Table 23. Quantities of selected foods purchased weekly by number and percentage of families

Pounds	Cheese		Meat		Beans		Coffee	
	No.	%	No.	%	No.	%	No.	%
Total	300	100	300	100	300	100	300	100
Under 1	78	26	4	1	21	7	98	32
1 - 2	162	54	19	6	95	32	158	53
3 - 4	26	9	56	19	57	19	11	4
5 - 6	2	1	69	24	96	32	3	1
7 - 8			67	22	5	2		
9 - 10			22	7	13	4		
Over 10			57	19	8	3		
None	31	10	5	2	4	1	29	10
No response	1	[1]	1	[1]	1	[1]	1	[1]

[1]Less than one-half of 1 percent.

Table 24. Number and percentage of times selected foods were served in households the day before the interview

Foods	Total		Number of times				
			1	2	3	4	None
	No.	%	%	%	%	%	%
Dried beans	300	100	31	27	6		36
Citrus	300	100	29	9	1	[1]	60
Meat	300	100	30	39	16	1	13
Eggs	300	100	76	2			22
Vegetable & beef soup	300	100	33	10	3	1	53

[1] Less than one-half of 1 percent.

Table 25. Number and percentage of times high carbohydrate foods were served

Times	Households	
	No.	Percent
Total	300	100
5 or less	222	74
6 - 10	73	24
11 - 20	3	1
No response	2	1

Table 26. Percentage of persons who drank a given number of glasses of milk the day before the interview

Glasses	Children[1]	Male head	Homemaker	Other adults
	%	%	%	%
Total	100	100	100	100
None		44	37	31
1	21	23	30	26
2	32	20	20	21
3	34	9	10	8
4	8	4	2	11
5 and over	5			
No response		1	1	3

[1] Age 2 to 20.

They were asked also in the final question on food to specify the number of glasses of milk children 2 years through 19 years, household heads and other adults drank the day before. Table 26. They were asked who had servings of dark green leafy and yellow vegetables, citrus foods such as fruits, tomatoes, raw cabbage, chilies, etc., as well as meat, poultry or fish on the day prior to the interview. Table 27. Homemakers' responses to these specific questions did not totally correspond with responses concerning what the homemaker said that she served her family the day before.

As to the question on food prepared or served the family, homemakers reported two-fifths had citrus, while as to the question on food groups, three-fourths of the adults and less than half of the children had citrus foods. However, responses of the 13 percent who said no meat was served adults the day before were very close to the responses of the 15 to 16 percent who said adults had no meat.

One question each was asked concerning milk, purchased and milk consumed, to try to obtain a higher degree of validity than might otherwise have been possible. When allowance was made for milk for infants under 2 years and the children 20 to 21 years old, computation on these two questions showed the number of quarts said to be purchased was approximately 10 percent above the number of quarts said to be consumed by household members in one day. This is no more than might be used in coffee and food preparation.

One homemaker gave no response concerning milk — all other families had on the average

Table 27. Number and percentage of persons who had given foods the day before the interview

Foods	Total		Age groups of children				Household heads		Other adults
			2-4	5-9	10-14	15-19	Male	Female	
	No.	%	%	%	%	%	%	%	%[1]
No. of individuals	1,454	100	100	100	100	100	100	100	100
Dark green leafy & yellow vegetables	395	27	22	20	23	23	34	35	32
Citrus	823	56	47	38	44	48	75	76	76
Meat, poultry and/or fish	931	64	63	45	46	52	85	84	84

[1] Percents total more than 100 because of duplication.

Table 28. Number and percentage of families who purchased quantities of whole, powdered and evaporated milk weekly

Fluid-whole			Converted-powdered			Evaporated		
No. of quarts	Families No.	Families %	No. of quarts	Families No.	Families %	No. of quarts	Families No.	Families %
Total	300	100	Total	300	100	Total	300	100
None	15	5	None	283	94	None	95	32
1 - 2	13	4	1 - 2	0	0	1 - 4	99	33
3 - 6	72	24	3 - 6	5	2	5 - 8	67	22
7 - 10	53	18	8 - 11	4	1	9 - 12	23	8
11 - 14	79	26	12 - 16	5	2	13 - 16	9	3
15 - 18	22	7	17 - 20	2	1	17 - 20	3	1
19 - 22	20	7	No response	1	[1]	21 & over	2	1
23 - 26	5	2				No response	1	[1]
27 & over	20	7				Don't know	1	[1]
No response	1	[1]						

[1] Less than one-half of 1 percent.

somewhat more than three quarts per person per week. Fluid milk was purchased most often in half-gallon jugs and evaporated milk in large cans. All forms of milk were converted to fluid quarts. Table 28.

More than three-fourths of the 965 children in all households had an average of 2.4 glasses of milk the day before the interview. Nine percent were infants under 2 years of age and were not included in this question. Nine percent between the ages of 2 and 20 years had no milk, and 5 percent of the respondents did not respond.

More than two-fifths of the male household heads, more than a third of the homemakers and almost one-third of the "other adults" had no milk. Table 26.

Summary

It is highly probable that the lower percentages given for the protective foods more nearly represent the food consumed by the families. The estimated amount spent for food per week in families of average size or larger also indicated that the average per meal per person expenditure was not sufficient to allow for the purchase of needed quantities of protective foods. However, purchase of meat in Juarez by 40 percent of the families extended the purchasing power of the food dollar for these families. Nevertheless, the quantities of meat and cheese homemakers said they usually purchased per week provided for an extremely low daily consumption of these foods, since many who purchased in Juarez were large families.

CLOTHING

Family Clothing Situation

To explore the possibility of motivating homemakers for more educational development through their interest in clothing, questions were asked to determine the level of knowledge in relation to selected clothing problems and to determine some homemakers' values related to clothing. Observations in the area were that children went to school looking clean and happy.

The first question on clothing was: "How many in your family buy some of their own clothing?" Almost 50 percent of the male household heads (in families with male heads) and 93 percent of the female heads bought some of their own clothing. In two families the father was said to have done all of the shopping. In another family the homemaker said she did no shopping.

In families where children participated in buying, it was very much a family affair. Thirty-four sons over 10 years of age did some of their own buying with other family members. Fathers assisted 4; both mother and father shopped with 16; and 14 shopped with mother only. Seven older daughters shopped alone, but 35 others between 10 and 21 years shopped with their mothers, with fathers or with fathers and brothers together.

Families put a high value on clothing from the United States. All except one family bought clothing in El Paso only, and none was purchased in Mexico.

Income class and family size were not related to which persons shopped for clothing.

Homemakers were asked next if, when they bought clothing, they usually asked the clerk or read the labels to learn how to clean or wash the clothing they bought. Seventy-four percent said they did, and another 7 percent said they sometimes did. The same question was repeated relative to whether or not clothing would shrink or fade. Sixty-six percent said they read the label or asked, and an additional 7 percent said they sometimes did. Income class, family size and age of homemakers were not related to responses to these questions; however, highest grade completed in school by the homemaker was related. The percentage of those who read the label or asked the clerk concerning washing or cleaning increased from 63 percent of those who had completed four grades or less to 90 percent of those who had completed 12 grades. For the second question, the range of "yes" responses was from 61 to 81 percent, from the lowest to the highest grade level.

To judge value homemakers placed on certain qualities of clothing for children, they were asked: "Which of the following is important to you in choosing clothing for girls under 10 years?" They were asked to list three in order of preference from a list shown them. The qualities shown them with the number of homemakers expressing each preference were: "Will last a long time" by 167 homemakers; "Is inexpensive" by 125; "Is pretty" by 112; "Is easy to keep clean" by 69; and "Takes little ironing" by 56. Obviously, this group placed a high value on cost, a moderate value on looks and a low value on time and effort required to wash and iron. In large families, less value was placed on prettiness and more on lasting qualities and ease of keeping the clothes clean. On the basis of age of homemakers, the young women with one or two children reversed these values in order of preference.

When homemakers were asked what their hardest problem was in keeping clothing ready for the family to wear, 16 percent said they had no problem; 62 percent said ironing was the hardest problem; 10 percent said washing; 6 percent said mending and sewing; and the remainder gave various combinations of the problems above stated.

Two-thirds of the homemakers had sewing machines, and about the same percentage of families in each family-size grouping had machines. Almost half said they made *no* clothing; 5 percent said they made *most;* and 39 percent said they made *some.*

The percentage who made some of the family clothing increased irregularly as grades completed in school increased. The range was from 33 to 51 percent. All of the homemakers who made most of the family clothing were in two educational levels — the one with schooling of 7 or 8 grades and the one of 12 years completed. More homemakers in income classes below $3,500 made most of the family clothing. Those who made some were distributed irregularly in all income classes and ranged from 14 percent (under $1,500) to 26 percent ($1,500-$2,499).

More than 40 percent of the homemakers 30 to 40 years of age and approximately 30 percent of other age groups said they made "some" or "most" of the family clothing.

Making and Remodeling of Clothing

Homemakers in every age level said they altered clothing if it did not fit. The range of those who did was from 72 to 100 percent for the various age levels, and an additional 5 to 11 percent said they altered clothing "sometimes." Since some said they did not sew, it was obvious that homemakers thought of sewing in relation to construction of the total garment and not alteration. Also, many of these homemakers did not have sewing machines and the work was done by hand.

Homemakers were then asked if they would like to learn more about fitting clothing. From 56 to 88 percent in the various age groups said "yes," and 4 to 20 percent said "perhaps." On the basis of highest grade completed, 87 percent of the homemakers who completed 4 grades or less said they did alter clothing. This percent decreased and was lowest (71 percent) for those with 9 to 11 grades completed. A total of 246 (82 percent) said they wanted to learn more about fitting. This was a very high proportion of the population and indicated priority in program need. Such training, if properly used, would help to conserve scarce dollars which could be used to improve the food situation or other needs. It also would help individuals to feel better dressed and more adequate socially as well as provide a feeling of accomplishment for homemakers and bring approval from husbands and children.

Laundry

Since keeping clean clothing ready for family members is a major task, homemakers were asked questions concerning the number of times they did washing each week and the equipment they used. In 8 percent of the households, laundry was a daily job. In 40 percent of the households, it was done once a week and in an additional 40 percent, twice a week. Twelve percent specified every two weeks, taken outside the home to be done by married children, etc.

Six percent laundered by hand and another 6 percent took clothes to a laundromat. Sixty-two percent of the households had wringer-type washing machines, and 25 percent had automatic ones.

SOCIAL PARTICIPATION

Social contacts for homemakers of this population was largely dependent upon the extended family. Eighty-eight percent belonged to no clubs, social groups or church-related groups. No question was asked about church membership. Nine percent of the homemakers belonged to one organization, 2 percent to two organizations and 1 percent to three.

To a question concerning going to the school for meetings such as Parent-Teacher Association, more than two-thirds of the respondents said they seldom or never went. Of the 11 percent who said they went regularly and the 20 percent who said they went to a few meetings, over 70 percent were between the ages of 30 and 49 years. These were primarily homemakers with incomes between $1,500 and $4,999.

USE OF MASS MEDIA

Sixty-nine percent of the homemakers said they usually read a daily newspaper, and an additional 8 percent said they sometimes read one. More homemakers read English than Spanish language papers. Almost two-thirds of the families had radios in working order, and more than four-fifths had televisions in working order. However, both radio and television stations to which family members listened were about equally divided between El Paso (English speaking) and Juarez, Mexico (Spanish speaking).

USE OF HEALTH FACILITIES

In 51 percent of the households, no one in the family had attended a health clinic during the year preceding the study. The Public Health Clinic was visited by someone in 28 percent of the families, which was the highest use made of any of the clinics listed. Family size was closely related to use of clinics. They were used by families in decreasing numbers as the age level of the homemaker increased — only 16 percent of the families with homemakers 60 years of age and over visited clinics compared to 63 percent with homemakers under 24 years. Also, as family size increased, the proportion of families using clinics increased. Table 29.

CULTURAL BACKGROUND

Forty-six percent of the fathers of homemakers in the area were Mexicans who had never lived in the United States. Of the fathers who had come to the United States, only 10 percent had come in the ten-year period prior to the study.

More than half of the homemakers could speak and read both Spanish and English. Thirty

Table 29. Number and percentage of families attending clinics the year before the survey by family size

			Number in family				
Clinics	No.	%	1-2	3-4	5-6	7-8	9 & over
Total records	300	100	100	100	100	100	100
None	153	51	87	67	47	24	19
Parental	12	4		1	5	4	13
Well baby	42	14		14	12	15	32
Preschool	24	8		4	9	6	26
Public health	85	28	10	15	33	48	45
Other clinics	26	9		8	6	15	16
No response	2	1	3		1		

Totals over 100 percent—families went to more than one clinic.

Table 30. Bilingual status of homemakers by grade completed

Speak (S) and/or read (R)[1]	Total		Grade completed—percent				
	No.	%	0-4	5-7	8	9-11	12 or more
Total records	300	100	100	100	100	100	100
S Spanish	12	4	11	1			
S & R Spanish	71	24	50	26	5	4	3
S & R Spanish, S English	14	4	5	8	2	2	
S & R both	164	55	28	57	71	77	85
S Spanish, S & R English	25	8	4	8	15	11	9
S & R Spanish & R English	5	2	2		5	2	
S & R English	3	1			2	4	

[1] No response, no homemakers—2 percent.

percent said they did not speak English. The predominant language spoken in homes was Spanish which presented a problem for children since English was spoken exclusively in classrooms. Thus, it constituted a major barrier to education of children and adults since more than a fourth of the homemakers had little command of the English language and many others had limited command.

As the number of years completed in school increased, the proportion of homemakers who could speak and read both Spanish and English increased from 28 percent of those who had 0 to 4 years of schooling to 85 percent of those with 12 or more years. Table 30.

All of the homemakers who responded to the income question and who could speak Spanish only and could not read were in income classes below $3,500. However, there were only 8 percent more bilingual homemakers in the $5,000 and over income class than there were in the under $1,500. Table 31.

These families were largely between two cultures — Mexican and that of the United States. Many elderly were closer to the Mexican way of life than to that of the United States. However, in many homes regardless of age, the homemaker said she would ask her husband if she might attend classes. The custom for women not to belong to organizations and to stay at home and care for the family is firmly established even for the young homemakers. The fact that less than one in seven of the homemakers was able to drive an automobile indicated an association with the culturally perceived role of the homemaker of the family.

Young household heads shopped together and with children for both food and clothing. Food prices in Juarez induced families to buy there, especially large families, but this was not true for clothing with *any* family. Meals served the family the day before the interview threw some light on eating habits. Some families had tortillas, some had bread and some had both at the same meal to accommodate the young and the old.

A high value was placed on caring for the extended family. This was shown by the number of persons not of the primary family in households and by homemakers who said their husbands sent money to relatives. The only source of clothing for one family was that sent by relatives from another state.

Table 31. Bilingual status of homemakers by income class

Speak (S) and/or read (R)	Total		Income class—percent[1]				
	No.[2]	%	Under $1,500	$1,500 to $2,499	$2,500 to $3,499	$3,500 to $4,999	$5,000 and over
Total records	300	100	100	100	100	100	100
S Spanish	12	4	10	3	5		
S & R Spanish	71	24	26	24	24	23	20
S & R Spanish, S English	14	4	5	1	6	7	6
S & R both	164	55	55	57	51	57	63
S Spanish, S & R English	25	8	2	8	10	8	11
S & R Spanish, R English	5	2		5	1		
S & R English	3	1		2		2	

[1] Did not know income or gave no response—3 percent.

[2] No homemaker or no response—2 percent.

In only one household did the homemaker report that her husband did *all* of the buying for the family.

The failure of families as age advanced to use medical facilities and the high death rate of Mexican-Americans at a relatively early age could be attributed primarily to economic circumstances or could relate to both economic and cultural factors which did not come to light in this study.

The extent of acculturation to the United States seems to vary greatly among individual families. Any education program to be of service to a high proportion of these families would need to be based on facts and careful observations of individual situations.

DIFFERENCES BETWEEN FAMILY SITUATIONS IN PUBLIC HOUSING AND PRIVATE DWELLINGS — AREA I

Differences in characteristics of homemakers and situations of families residing in the public housing development and in private dwellings were great enough to be statistically significant. A *higher* proportion of homemakers was under 30 years of age, had completed from 1 to 4 years of high school, was able to communicate in two languages and had a shorter period of residence in public housing than in private dwellings. A *lower* proportion of those in public housing received incomes of $2,500 and over, spent $20 or more a week for food and read a daily newspaper than did homemakers in private dwellings. Table 32.

Table 32. Differences tested for significance between situations of families in public housing and in private dwellings—Area I

			Dwellings		Statistical significance	
Characteristics	No.	%	Public %	Private %	%	%
Total records	158	100	40	60	1	5
Homemakers under 30 years			39	29		Sig
Homemakers with 1-4 years H.S.			42	23	Sig	
With children under 5 years			71	46		Sig
Spend $20 and over for food			54	76	Sig	
Incomes $2,500 and over			33	68		Sig
5 or more years in residence			28	69		Sig
Usually read newspaper			56	79		Sig
Income under $1,500			21	10	None	None
$1,500 - $2,499			46	16		Sig
$2,500 - $3,499			22	20	None	None
$3,500 - $4,999			10	25	Sig	
$5,000 and over			1	23		Sig
Total number persons			338	487	None	None
Average per family			5.37	5.24	None	None

The average size of families in public housing was somewhat larger than families in private dwellings. And, while all public housing apartment dwellers were nonowners, 77 percent of the families in private residences owned completely or were buying their homes.

These differences will affect program emphasis and methods by which homemakers can be reached with an educational program. Social interaction between a younger, better educated, more economically deprived and more mobile group and an older, more stable and somewhat better off economic group may be extremely slow if it takes place in the foreseeable future.

Section 3. Significant Differences Between September 1962 and April 1964

The Situation (Bench-Mark) Study, made in September 1962, was followed after 18 months of Extension work in the study area by an intermediate Evaluation Study in April 1964. The purpose of this intermediate evaluation was to guide program adjustments and learn the comparative value of given methods used with this population group.

Differences were not significant between the two studies in the percentage of household heads in the various age and education groupings, the number of children in various age groups and the marital status of homemakers. Differences were not significant between them in occupations of male household heads, family incomes and amounts spent for food the week before the interview. Tables 33 and 34.

Minor changes took place in this 18-month period. They may have amounted to major changes for many individual families, but when taken together, the changes were not statistically significant.

There was some change in the average family size. It rose from 5.22 to 5.56 persons per family. The 1962 study revealed that 62 "other adults" lived in households and the 1964 study revealed 99. This was an increase of 1.72 percent of all persons in households in the sample.

The child population also increased 1.45 percent relative to adult household heads. When "other adults" were deleted from the two samples and only household heads and children were considered, children composed 64.16 percent of the population in 1962. Eighteen months later,

Table 33. Number and percentage of family members in various age groups

Age group	1962		1964	
	Number	Percent	Number	Percent
Homemaker—				
total number of records	295	100	311	100
19 and under	5	2	6	2
20 - 24	25	8	27	9
25 - 29	36	12	36	11
30 - 39	112	38	114	37
40 - 49	65	23	80	26
50 - 59	27	9	25	8
60 and over	25	8	23	7
Total response	300	100	313	100
Response to age	295	98	311	99
No homemaker	3	1	2	1
No response & don't know	2	1		
Husband—				
total number of records	241	100	254	100
19 and under	1	1	3	1
20 - 24	17	7	13	5
25 - 29	22	9	33	13
30 - 39	84	34	79	31
40 - 49	64	27	79	31
50 - 59	29	12	23	9
60 and over	24	10	24	10
Total response	300	100	313	100
Response to age	241	80	254	81
No husband	58	19	59	19
Don't know	1	1		
Children—				
total number of children	965	100	1,078	100
Under 5	238	25	273	26
10 - 14	276	29	280	26
15 - 19	259	27	273	26
20 - 21	168	17	219	9
Families with no children	32	11	29	9
Families with children	268	89	284	91

Table 34. Number and percentage of household heads who completed given grades in school in 1962 and 1964

	1962		1964	
	Number	Percent	Number	Percent
Homemaker—				
total number of records	292	100	309	100
4th or less	93	32	100	32
5th - 8th	116	40	118	38
1 - 3 high school	51	17	60	19
4 high school	31	11	26	9
Some beyond high school	1	[1]	5	2
Total response	300	100	313	100
Response to education	292	97	309	98
No homemaker	3	1	2	1
No response	5	2	2	1
Husband—				
total number of records	226	100	242	100
4th or less	59	26	72	30
5th - 8th	97	43	80	33
1 - 3 high school	37	16	44	18
4 high school	26	12	37	15
Some beyond high school	7	3	9	4
Total response	300	100	313	100
Response to education	226	75	242	77
No husband	58	19	59	19
Don't know	11	4	9	3
No response	5	2	3	1

[1] Less than one-half of 1 percent.

Table 35. Comparison of family characteristics between 1962 and 1964—number and percentage of families in given income class and kind of employment of husband

	1962		1964	
	Number	Percent	Number	Percent
Total number	300	100	313	100
Income of the family				
Less than $1,000	17	6	11	3
$1,000 - $1,499	25	8	28	9
$1,500 - $2,499	85	29	69	22
$2,500 - $3,499	67	22	99	32
$3,500 - $4,999	61	20	49	16
$5,000 and over	35	12	51	16
No response	6	2	6	2
Don't know	4	1		
Kind of occupation	213	100	226	100
Unskilled laborer	58	27	59	27
Craftsman or skilled laborer	55	26	45	20
Operative	37	17	48	20
Service worker	18	8	50	22
Sales & clerical	29	14	13	6
Professional - foreman	10	5	4	2
All others	6	3	7	3
Responses to occupation	300	100	313	100
Employed	213	71	226	72
Unemployed	8	3	7	2
Pension or retired	16	5	19	6
No husband	58	19	59	19
No response	5	2	2	1

children composed 65.61 percent of the population. These two increases resulted in an increase in the average family size of 0.34 persons.

Table 36. Family expenditure for food last week

Amount	1962		1964	
	Number	Percent	Number	Percent
Total records	300	100	313	100
$ 5	8	3	10	3
$10	32	11	39	13
$15	61	20	66	21
$20	66	22	76	24
$25	57	19	47	15
$30 or more	73	24	68	22
Don't know and no response	3	1	7	2

In the period between the studies, a statistically significant increase took place in the percentage of families receiving incomes of $2,500 and over. In the first study, 54 percent of the families reported incomes of $2,500 and over; in the second study, 64 percent of the families reported this level. Also, the number of families with incomes below $1,000 dropped from 6 to 4 percent. Table 35. However, expenditure for food declined slightly. There was a 3 percent increase in the number of families who reported spending less than $20 per week for food, 4 percent decrease in those spending $25 and a 2 percent decrease in those spending $30 or more. Table 36.

Section 4. Behavioral Changes and Comparative Effectiveness of Methods

Awareness of a program and what it has to offer must exist before educational changes can take place in people. Methods selected to hasten awareness were a newsletter that would carry information and program announcements and home visits. These two methods were used in Area I only. Also, mass media were utilized which would reach audiences in both Areas I and II.

FOODS AND NUTRITION

Numerous methods were used in foods and nutrition to test the effectiveness of methods in Areas I and II and the flow of information from Area I to Area II. The *Food for Fitness Guide* in both English and Spanish was used intensively for this purpose.

In 1962 the question was asked, "Have you ever heard of the *Food for Fitness Guide?*" In both areas, 8 percent of the homemakers said they had. However, when the question was repeated in 1964, 51 percent of them said they had heard of it. This change in awareness and knowledge took place in homemakers in every income class and age level. On the basis of income, the range of increase was from 21 percent for the lowest to 59 percent for the next to the highest income class. Table 37. On the basis of age levels of homemakers, the highest percentage of change was for women between the ages of 30 and 49. The lowest percentage of change was for those under 25 years of age. Table 38.

The 160 homemakers in Areas I and II combined who said they had heard about the Guide were asked how they had heard about it. Almost three-fourths of them said they received the information in a letter. The next method of importance was television which reached slightly over a fifth of them. On the basis of education of the homemakers, 50 percent of those who had had no schooling said they received the information in a letter. Generally as grades completed in school advanced, the percent specifying a letter increased and reached 79 for those with 4 years of high school or more. Television retained second place, but it reached over twice as many homemakers with no schooling as it did homemakers at any formal educational level. Obviously homemakers placed value on the *Food for Fitness Guide*. Of the 160 who had heard about it, 51 percent said they had a copy. The percentage of those who had copies ranged from 25 for those who had no schooling to 64 percent for those with from 1 to 3 years of high school. Table 39.

On the basis of income data from Areas I and II combined, the percentage of those who had heard about the Guide increased as income increased from more than a third for the lowest income class to about two-thirds for the two highest income classes. Table 40. The percentage who said their source of information was from a letter increased as income increased — ranging from 23 for the lowest to 59 percent for the highest income class. Homemakers in the highest income class were reached by only two and those in the lowest by only four methods other than the letter and television. The middle-income classes were reached by five

Table 37. Relationship of income with having seen or heard of Food for Fitness Guide—Areas I and II combined

Response	Total		Income class				
			Under $1,500	$1,500 to $2,499	$2,500 to $3,499	$3,500 to $4,999	$5,000 and over
	No.	%	%	%	%	%	%
1962—yes	25	8	10	8	9	10	6
1964—yes	160	51	31	51	46	69	65

Table 38. Relationship of age of homemaker with having seen or heard of Food for Fitness Guide—Areas I and II combined

	Total		Age of homemaker					
			Under 25	25-29	30-39	40-49	50-59	60 & over
Response	No.	%	%	%	%	%	%	%
1962—yes	25	8	7	11	6	14	7	4
1964—yes	160	51	30	42	59	61	36	39

and six methods in addition to the letter and television.

Some homemakers in every income class except the lowest said their source of information was friend or neighbor. This suggests the isolation of many low-income homemakers; however, for all income classes of this population, the proportion reached by friends and neighbors was low.

Food for Fitness Guides were sent to all homemakers in Area I. Area II homemakers were asked by interviewers if they would like to have a copy, and only those who answered in the affirmative were sent copies. While no classes were held for Area II homemakers, a few went to Area I classes and some to clinics where the home demonstration agents gave lessons and demonstrations for those who were there specifically for health purposes.

Table 39. Relationship of source of information on Food for Fitness Guide with education of homemaker in 1964—Areas I and II combined

Source of information	Total		Education of homemaker				
			None	1st-4th	5th-8th	1-3 yr. high	4 yr. high or more
	No.	%	%	%	%	%	%
Total number with information[1]	160	100	100	100	100	100	100
Letter	114	71	50	69	75	73	79
TV	33	21	42	20	18	12	29
Class	20	12	8	13	13	15	8
Friend or neighbor	15	9		8	12	9	15
Clinic	9	6	17	8	3	3	8
Newspaper	7	4	8	3	7	3	
Radio	5	3	17	5		3	
Children	5	3		5	3	3	
Relative (adult)	2	1	8			3	
Yes responses to do you have a copy of **Guide**	82	51	25	51	52	64	50

[1] Totals over 100 percent—some gave more than one source.

Table 40. Relationship of source of information on Food for Fitness Guide and income in 1964—Areas I and II combined

Source of information[2]	Total		Income class[1]				
			Under $1,500	$1,500 to $2,499	$2,500 to $3,499	$3,500 to $4,999	$5,000 and over
	No.	%	%	%	%	%	%
Total number of records	313	100	100	100	100	100	100
Had not heard	153	49	69	49	54	31	35
Letter	114	36	23	30	34	41	59
TV	33	10	13	7	8	27	6
Class	20	6	3	10	5	8	6
Friend or neighbor	15	5		4	7	6	4
Clinic	9	3	3	3	5		
Newspaper	7	2	5	4	1	2	
Children	5	2			3	4	
Radio	5	2		1	1	6	
Relative (adult)	2	1	3			2	

[1] No response—3 percent.

[2] Totals over 100 percent—some gave more than one source.

Table 41. Source of information on Food for Fitness Guide by area in 1964

Source of information	Area I Number	Area I Percent	Area II Number	Area II Percent
Total responses	120	100	40	100
Letter	107	89	7	18
Television	20	17	13	33
Class	16	13	4	10
Friend or neighbor	8	7	7	18
Clinic (class)	4	3	5	13
Newspaper	1	1	6	15
Children	2	2	3	8
Radio			5	13
Relative (adult)	2	2		

Source of Homemaker Information

The letter as a source of information in Area I far exceeded other methods; however, in Area II television was the predominant source of information. Table 41. Other methods probably would have ranked higher in Area I if no letters had been sent. However, the results are evidence of the importance of mail to these homemakers — it was the method they remembered best and reported most often.

New Knowledge Concerning the Four Food Groups

In 1962 and 1964 interviews, homemakers were asked to name as many of the four food groups as they remembered. In 1962, 2 percent could name from one to three of the groups, but only one person could name the four. In 1964, 29 percent could name all four of the groups and from 40 to 49 percent knew from one to three groups. This increase in knowledge extended throughout all income classes and age levels. Tables 42 and 43.

Table 42. Homemakers by income classes in 1962 and 1964 who could name one or more of the four food groups—Areas I and II

Groups named	Total No.	Total %	Under $1,500 %	$1,500 to $2,499 %	$2,500 to $3,499 %	$3,500 to $4,999 %	$5,000 and over %
Total—1962	300	100	100	100	100	100	100
Milk	5	2	5		2	2	3
Meat	6	2	5	1	2	2	3
Veg. & fruit	2	1		1			3
Bread & cereal	3	1	2		2		3
All 4	1						
Total—1964	313	100	100	100	100	100	100[1]
Milk	176	56	36	55	56	71	61
Meat	185	59	38	57	59	78	61
Veg. & fruit	172	55	36	54	54	75	53
Bread & cereal	124	40	33	36	37	57	37
All 4	92	29	23	25	28	49	28

[1]Columns total over 100 because of duplication.

Table 43. Relationship of age of homemaker to food group recalled—Areas I and II combined

Groups named	Total No.	Total %	Under 25 %	25-29 %	30-39 %	40-49 %	50-59 %	60 & over %
Total—1962	300	100	100	100	100	100	100	100
Milk	5	2		3	2	3		4
Meat	6	2		3	2	3		4
Veg. & fruit	2	1				3		
Bread & cereal	3	1				2		
All 4	1	1				2		
Total—1964	313	100	100	100	100	100	100	100[1]
Milk	176	56	59	50	61	64	40	48
Meat	185	59	53	58	65	64	40	52
Veg. & fruit	172	55	44	42	65	56	44	61
Bread & cereal	124	40	34	39	45	41	32	30
All 4	92	29	28	22	35	31	20	22

[1]Columns total over 100 because of duplication.

Table 44. What dark green leafy vegetables contain for growth and normal vision by area

Responses	Area I		Area II	
	Number	Percent	Number	Percent
Total number of records	171	100	142	100
Vitamin A	24	14	9	6[1]
Some other answer	64	37	63	44
Don't remember	28	16	22	16
Don't know	55	33	47	33

[1] Statistically significant at the 5 percent level.

Homemakers were then asked what nutrient important to good health was found in three of the four food groups. Most of them were able to specify calcium in milk. Responses to the other two groups are shown in Tables 44 and 45.

To test further the knowledge of homemakers and to obtain information for program adjustment, homemakers were shown four cards singly with a picture of one of the food groups on each and were asked what the foods in each group did for health. More homemakers in Area I were better informed than were those in Area II, but differences were slight. Table 46. Homemakers were asked where or how they had seen or heard about food for the good health of the family during the past year. Table 47.

Of the 122 (71 percent) homemakers in Area I who indicated they had received letters and folders in the mail, 94 percent said specifically they had read them. Other sources of information were listed in the order of their importance. In Area II, television continued to outrank any other method, and it was followed by posters and newspapers, equally important.

Table 45. What oranges, tomatoes, etc., contain to keep body tissues healthy and strong by area

Responses	Area I		Area II	
	Number	Percent	Number	Percent
Total number of records	171	100	142	100
Vitamin C	65	38	52	36
Vitamin A	3	2	2	1
Some other answer	28	16	30	21
Don't remember	24	14	13	9
Don't know	52	30	46	32
No response			1	1

Table 46. Knowledge of what food groups do for health by area

	Homemakers			
	Area I		Area II	
	Number	Percent	Number	Percent
Picture of the milk group—total	171	100	142	100[1]
Builds good bones & teeth	48	28	34	24
Provides protein	8	5	4	3
Provides vitamins	8	5	11	8
Gave some other answer	52	30	43	30
Don't know	55	32	50	35
Picture of meat group—total	171	100	142	100
Growth of body tissues	3	2	2	1
Good for blood, skin & hair	21	12	12	9
Protein supply	19	11	9	6
Provides vitamins	10	6	9	6
Gave some other answer	53	31	45	32
Don't know	66	39	64	45
No response			1	1
Picture of veg. and fruit—total	171	100	142	100
Provides vitamin C for gums and tissues	13	8	8	6
Provides vitamin A for vision and growth	25	15	18	13
Healthy skin	3	2	1	1
Provides minerals	3	2	2	1
Gave some other answer	62	36	56	39
Don't know	65	38	59	42
Picture of breads & cereals—total	171	100	142	100
Provides vitamin B	4	2	1	1
Aids nerves, digestion, body functions	4	2	2	1
Gives energy	11	6	7	5
Provides protein & iron	9	5	3	2
Gave some other answer	54	32	43	30
Don't know	88	52	85	60
No response	1	1	1	1

[1] Some columns total over 100 percent—women gave more than one response.

More than two-thirds of the homemakers in Area I who reported a visitor in their homes to discuss food for health specified the home demonstration agent by name as the visitor.

Table 47. Sources of information on food for good health of the family by area

Source of information	Area I		Area II	
	Number	Percent	Number	Percent
Total number of records	171	100	142	100
Letter or folder in mail	122	71	17	12
Television	57	33	60	42
Class at well baby clinic	34	20	7	5
Posters in clinic, church and housing center	33	19	36	25
Newspaper	30	17	36	25
Visitor in your home	27	16	9	6
Relative (adult)	22	13	22	16
Radio	15	9	27	19

Weight Control

One phase of the Extension program conducted by the home demonstration agent was weight control. Homemakers were asked what dangers or problems they thought overweight caused. In Area I, 61 percent had heard about weight control and in Area II, 58 percent had heard. Of those in both Areas I and II who had seen or heard about it, more than 90 percent said it caused heart trouble and more than 50 percent said high blood pressure. Table 48. Mailed literature and television were the two methods reported as the source of information by the highest percentage of the homemakers. Table 49. This was the only question asked concerning "source of information" in which television took precedence over the letter in Area I and in this instance by only 1 percent.

Table 48. Reported dangers and problems of being overweight by area

Danger and problems	Area I Number	Area I Percent	Area II Number	Area II Percent
Total responses	105	100	82	100
Heart disease	97	92	78	95
High blood pressure	59	56	42	51
Hardening of the arteries	3	3		
Diabetes	12	11	8	10
No danger	2	2	4	5
Other[1]	9	9	11	11

[1] Responses grouped under "Other" included: not healthy, asthma, shortness of breath, does not look well in clothes.

Table 49. Source of information on weight control by area

Source of information	Area I Number	Area I Percent	Area II Number	Area II Percent
Total	105	100	82	100
Letter	55	52	5	6
Television	56	53	54	66
Radio	16	15	18	22
In class	8	8	4	5
Other (doctor, magazine, etc.)	41	39	50	61

Foods Served the Family the Day Before the Interviews

Protective foods that were low in meals served families the day before the interviews in 1962 were likewise low in 1964. Tables 50 and 51. Increased knowledge had not brought a change in the situation. In 1962, 13 percent and in 1964, 15 percent of the families had no meat of any kind the day before. An additional 5 percent had stew, soup or hash. There was little difference in the quantities of cheese, meat and

Table 50. Percentage of households in which the following foods were not served in the 24-hour period before the interview in 1964 by area

Food	Percentage not served Area I	Percentage not served Area II
Dairy products		
Eggs	15	16
Milk	15	11
Chocolate milk	88	92
Cheese	88	88
Macaroni & cheese	97	96
Chili con queso	100	99
Ice cream	94	89
Vegetables		
Dark green leaf	93	88
Beans	43	57
Tomatoes	97	89
Others	32	48
Salads		
Lettuce & tomato	66	70
Cole slaw	100	99
Guacamole	99	99
Fruits		
Citrus	71	80
Other	91	71
Meats		
Ground beef	67	78
Beef steaks/roasts	62	74
Bacon	78	83
Ham	94	95
Pork chops/steak	95	92
Poultry	88	81
Sausage	93	97
Cold cuts	97	96
Vital organs	95	98
Fish	97	98
Other	95	97
Soups & stews		
Vegetable	92	92
Beef & vegetable	82	90
Chicken noodle	95	94
Chili con carne	100	98
Hash or stew	97	94
Other	98	88
Sandwiches		
Peanut butter	98	99
Jelly or jam	98	99
Meat	93	92
Cheese	99	99
Tacos	96	96
Other	99	98
Bean sandwich	94	88

Table 51. Percentage of times breads and cereals were served in households the 24-hour period before the interview in 1964 by area

Breads and cereals	Percent served Area I	 Area II
None	3	8
Served 1 time	13	15
" 2 times	20	24
" 3 times	21	39
" 4 times	21	25
" 5 times	16	19
" 6 times	6	8
" 7 times	1	2
" 8 times	0	1
No response	0	1

beans said to be purchased per week by families. In 1962, 60 percent of the families had no citrus fruit and in 1964, 75 percent had none. Food expenditure in 1964 had been "squeezed" downward by some families who were spending at a high level. Increase in the Consumer Price Index, increase in family size and no appreciable increase in incomes made it highly unlikely that diets could have improved over the 18-month period between the two surveys.

The kinds and amounts of milk reported purchased in 1962 and 1964 are shown in Table 52.

Milk consumption increased in the area, but the increase in family size reduced the per person increase to a negligible quantity. There was heavy stress in the program on the use of the two less expensive forms of milk and both showed an 11 percent increase in the number of families using them.

Foods and Nutrition Class Results

Twenty-eight percent of the homemakers in Area I who had attended any classes had been visited by the home demonstration agent and, of these, 83 percent identified the agent by name.

Table 52. Milk purchased

	1962 Quarts used	 Households using - percent	1964 Quarts used	 Households using - percent
Total households	300	100	313	100
Fluid - whole	3,370	95	3,570	96
Powdered	168	6	528	17
Evaporated	1,293	68	1,347	79
Total quarts used	4,831		5,445	
Average quarts per person per week	3.09		3.12	

Eleven percent in Area I had attended foods and nutrition classes. Most of these homemakers said they had served dark green leafy and dark yellow vegetables from one to three times the week before the interview.

When asked if they had prepared selected dishes for their families after they had seen them demonstrated, 47 to 58 percent said they had. Almost 40 percent said they usually served a food rich in vitamin C. However, when asked what they had served the morning of the interview, 20 percent mentioned food that did not contain vitamin C.

Eighty-seven percent of the women who attended foods and nutrition classes said they wanted to learn more about both of these subjects. Economy in buying and "how to save" were their greatest concerns.

CLOTHING AND MANAGEMENT

The results of the clothing and management phases of the program are reported in Section 4 under classes because most of this work was done in classes. Some clothing television programs were conducted, and they are reported also in this section.

IMPACT OF SELECTED METHODS IN AREAS I AND II

Information concerning the effectiveness of methods in bringing about change in the two areas has been brought together relative to four selected phases of the foods and nutrition program. Table 53. Although all methods were not used in extending information on all four of these subjects, they are listed to show the impact where they were used. From 52 to 86 percent of the homemakers specified the letter with mailed literature as the source of information on these subjects in Area I. Television was second and classes were third in importance as a source of information to these homemakers.

Television was specified as the source of information on these four subjects by 11 to 66 percent of the homemakers in Area II. The newspaper and the radio vied for second and

Table 53. Percentage of homemakers influenced by given methods in selected subject matter—Areas I and II

Questions on "Where or how did you see or hear about":

1. The Food for Fitness Guide.
2. What the four food groups do for your health.
3. Food for the good health of the family.
4. Weight control.

Method	Area I				Area II			
	Percent[1]				Percent[2]			
Questions	1	2	3	4	1	2	3	4
Letter	86	53	71	52	18	2	12	6
Television	17	13	33	53	33	11	42	66
Class	13	14	20	8	10	3	5	5
Clinic (class)	3	11	6		13	6	8	
Newspaper	1	16	18		15	5	25	
Radio		8	8	15	13	3	19	22
Poster			19				25	
Friend/neighbor	7	8			18	3		
Adult relative	2	3	13			1	16	
Children	2	10			8	4		
Visitor in home			16	39			6	
Other		11				13		61
Don't remember—No response					2	5		

Columns total over 100—some gave more than 1 response.
"Yes" responses to having seen or heard about:

[1] Area I—Total interviews—171 (100%)
1. Based on 120 (70%)
2. Based on 132 (77%)
3. Based on 171 (100%)
4. Based on 105 (61%)

[2] Area II—Total interviews—142 (100%)
1. Based on 40 (28%)
2. Based on 107 (75%)
3. Based on 142 (100%)
4. Based on 82 (58%)

third methods in importance. The letter and mailed literature showed considerable importance in this area; however, letters were sent to Area II homemakers only if they called the home demonstration agent and asked to be put on the mailing list or if they had letters passed on from relatives and friends in Area I.

Although monthly mailed letters and television were recognized as the source of information by more homemakers than other methods, all methods used made some contribution and were instrumental in bringing awareness of the program and new knowledge to homemakers in 18 months' time.

MAIL AS THE ONLY SOURCE OF INFORMATION

Of the 160 homemakers who said they had "seen or heard about" the *Food for Fitness Guide,* 72 said the mailed piece was their only source of information.

Of the 82 who had a copy when they were interviewed, 43 said they had received it through the mail and had no other source of information.

Of these 43, 72 percent were able to name the milk group; 70 percent named the fruit and vegetable group; 65 percent named the meat group; and 49 percent named the bread and cereal group. Forty-two percent were able to name all four groups.

Of the 139 homemakers who said they received mail information on the "good health of the family," 94 percent said they had read the information and 82 percent gave the letter as their only source of information.

On weight control, 60 homemakers said they had read the information in a letter and, of these, 28 percent gave the letter as the only source of information.

In 15 percent of the households of both areas, homemakers said they had no source of information on any subject matter covered by the questionnaire except the letters from the home demonstration agent.

These homemakers represented all income classes with the proportion increasing irregularly as income increased. The range was from 6 percent in the lowest to 37 percent in the highest income class. In these 49 homes there were 288 persons, 176 of whom were children. The average family size was 5.9 persons and the families had children in all age groups.

Section 5. Characteristics of Homemakers Who Attended Classes and Results of Classes

An outstanding characteristic of this culture is that homemakers participate little, if any, in activities outside the home, the extended family and the Church. Consequently, one of the major methods to be tested was meetings. When the project began, home visits were established as a major part of the home demonstration agent's schedule to create awareness of the program and to provide an opportunity to invite homemakers to gather in groups to determine if direct teaching was possible in groups.

The term "class," to include all meetings in groups of any size, was adopted for use. The term connoted education, and husbands were more willing for their wives to meet in groups when education was expressed in a familiar term as the purpose of their coming together.

Because of the extreme importance of this method of teaching, additional resources were expended to better evaluate the results of class work. To obtain more responses in relation to classes, schedules from the random sample of all women who had attended *any* classes were processed with schedules taken from women who were recorded on the Extension class records and not drawn in the random sample. A composite of schedules drawn in this manner yielded 72. Not all women who attended any classes but a high proportion was interviewed.

The data provided information about the characteristics of women who attended classes and results of selected phases of the program. It also indicated the most influential methods for teaching these women. Some class attendance was involuntary in that the agent went to clinics in the area and gave demonstrations to homemakers who went to the clinic for health purposes and not specifically for class work. Some homemakers attended classes in all subject-matter areas offered while others attended only one, and attendance of some homemakers was dependent upon where the meetings were held.

FAMILY SITUATION OF WOMEN WHO ATTENDED CLASSES

Fifty-one percent of the women who attended classes had been visited in their homes and invited to attend. Of these, 90 percent were able to identify the home demonstration agent by name as the visitor.

Fifty-nine percent of all homemakers in the study areas were between the ages of 30 and 49 years. However, a higher proportion, 79 percent, of those who attended classes were of this age level.

The average family size of households was almost one person greater than the average for the study area. The range in household size was from 1 to 14 persons. Need for educational advancement in large families may have been great or other family members may have been available to care for small children when the homemaker was in class. Eighteen percent of the homemakers had completed 4 grades or less in school. This compared to 31 percent at this educational level in the study area.

Twenty-one percent who attended classes were in each of the two income levels between $1,500 and $3,499; 27 percent had incomes of from $3,500 to $4,999; and 16 percent had incomes above this level. Three and 4 percent had incomes of under $1,000 and $1,000 - $1,499 respectively.

Approximately the same proportion of women were employed in the study area and in the group who attended classes. In summary, the women who attended classes were middle-aged, at a higher educational level, had slightly more income and had larger families on the average than did homemakers in the study area as a whole.

FOODS, NUTRITION AND MANAGEMENT

Fifty-two women (72 percent who attended any classes) said they had attended some classes on foods and nutrition. Eighty-one percent who had been in classes had heard of the *Food for Fitness Guide*. Of these, 68 percent said they had a copy. Fifty-seven percent said they had received this information in a letter, and 54 percent said they had learned about it in a class. Since all had received mailed literature, some homemakers gave more than one source for new knowledge. The proportion of homemakers in the study area and in classes who reported methods of acquiring this information was practically the same.

The homemakers were asked if they had prepared for their families six selected dishes which had been demonstrated in classes. From 37 to 56 percent of them said they had and had attended classes on the selected subjects. In relation to increased knowledge concerning meats, 74 percent said they were able to buy cuts of meat more satisfactorily and 78 percent said they had learned to cook with moist heat. Also, two-thirds said they had changed the way they planned their meals.

Women who had attended classes obviously had attempted to use the knowledge and skill obtained in the classes.

CLOTHING AND MANAGEMENT

Fifty-four percent of the women who attended any classes attended clothing classes. They were almost equally divided between those drawn in the random sample and those drawn from the class rolls. Some of these women were in each of the income classes, but the proportion with incomes of $1,500 and over was much higher than those with incomes below this level.

More than three-fourths said they were better able to alter all or some pattern styles to fit themselves. More than two-thirds knew that their figure type made a difference in the style and size of clothing to select. Almost half had talked over this problem with one or more friends, neighbors or relatives. Almost a third of the 72 women who had attended any classes, but *not* clothing, said they would like to have classes in fitting and making dresses.

Thirty-one percent said they had seen programs on buying children's clothing in classes or on television. These homemakers were distributed throughout the income class range. Almost three-fourths had talked with other adults about the selection and buying of children's clothing.

Thirty-one percent had seen a television program or attended a class on buying children's shoes. More than half identified fitting shoes as the most important thing to think about when buying children's shoes. Others identified cost and quality as most important. Almost half of the women (10) had talked with a total of 28 other adults concerning problems of buying children's shoes. Nine of the ten homemakers who said they had talked with others concerning this problem had incomes of $1,500 and over.

Homemakers had had varying lengths of time between the completion of the series of classes in clothing and the interview period. However, 69 percent reported having made clothing for some family member in this period. Selected accomplishments as a result of these classes follow:

- —70 percent said it was easier for them to use sewing machines since classes.
- —63 percent said they had selected fabrics for clothing, which was now easier.
- —59 percent said they had purchased patterns and 44 percent said they tried to buy patterns that would be easy to fit and make.
- —59 percent had made clothing for boys and/or girls.
- —30 percent had made one; 4 percent had made three; and 4 percent had made six garments for boys.
- —19 percent had made one; 15 percent had made two; and 12 percent had made three to eight garments for girls.
- —Garments made by these homemakers for others were boys' shirts; baby clothes; girls' dresses, blouses and skirts.
- —48 percent had made dresses for themselves.

About three-fourth of the homemakers attending any classes said they would like to have classes on buying and/or making children's clothing and more than two-thirds wanted information on buying children's shoes.

Almost a third had attended classes on washing and ironing clothes. They were distributed throughout the income class range. No one had made changes in washing supplies, and less than half had made changes in ironing equipment. Of the eight who made such changes, all were in the income class of $2,500 and over.

Responses to improvements women had made included: purchase of new ironing board pads; floor pads to stand on; arrangement of clothing on shelves; and saving motion and time by ironing with both hands. All said they thought they knew how to buy drip-dry clothing and fabrics.

Results from the clothing classes indicate interest and willingness on the part of Mexican-American women to learn how to buy and construct clothing. The random sample of Area I indicates that about 16 percent of the homemakers had been reached directly in clothing classes and that information had been extended to others by some of the participants. Such classes are time-consuming for the agent, and a comparatively small number of women can be trained during a given period. However, this training has a growth factor since women improve as they continue to construct their own clothing. As income grows less adequate with rising prices, savings in cash and/or length of wear of garments resulting from home construction become increasingly important.

Section 6. Use of Findings

TRAINING OF EXTENSION AGENTS

After analysis of data obtained in the April 1964 Evaluation Study, two in-service training conferences on reaching Mexican-American families with Extension educational programs were conducted. One conference was in San Antonio, Texas, March 24-26, 1965, and the other in San Angelo, Texas, April 29-31, 1965. More than 200 staff members of the Texas Agricultural Extension Service participated in these conferences. A copy of the program for these conferences appears in the Appendix.

The primary audience was county Extension agents serving in counties which either had a sizable total Mexican-American population or a sizable proportion of this population in relation to the total population. Specifically, county home demonstration agents from counties having a Spanish-surname population amounting to 15 percent or more of the total population and those having a Spanish-surname population of 2,500 or more in 1960 were expected to participate. This involved 92 counties located in the southern, southwestern and western parts of the state. It did include a few of the more heavily urbanized counties in the northern and eastern parts of the state which, while they had a low proportion of Mexican-American population, had a large total population in this category. County agricultural agents from these counties as well as agents from counties not in these categories could participate if they desired, and a number in this situation elected to do so. In addition, all state- and district-level Extension home economists participated as did a number of other state- and district-level staff members.

A principal purpose of these meetings was to present the findings of the El Paso Special Project and to help staff members make use of these findings in their conduct of ongoing Extension educational programs. Also, an effort was made to develop in the participants a better understanding and appreciation of the Mexican-American subculture and how the values of this group needed consideration in the development and conduct of educational programs.

One year after the in-service training conferences, a questionnaire was sent to the participants to ascertain how effective the training had been, and reports were received from 86 counties. Responses varied greatly as did county situations. Some counties had one agricultural agent only while others had both agricultural and home demonstration agents. In some counties the Mexican-American population constituted as high as 77.6 percent of the population and in others it was as low as 2.5 percent. Some agents had programs well under way with Mexican-American populations before the training workshops, while others had done little up to that time.

Such varied situations made it difficult to assess the effectiveness of the training. However, reports indicated that a high proportion of county Extension agents were motivated to move toward more intensive and extensive educational programs with this population in their counties. The range in work accomplished was from an effort to get acquainted with the people through home visits and demonstrations at health clinics to the establishment of organizations through which the agents could work with larger numbers of people. Agents reported that extended families were reached through 4-H and older youth meetings and activities. In many instances, adults outnumbered youth at youth events — the family came, including babies, grandparents, uncles and aunts. Table 54.

Reports also indicated a wide variation in the degree of acceptance of the culture of the United States. Some agents said there was little difference between the Mexican-Americans and other cultural groups in their counties. Others indicated populations similar to that in the El Paso study area. Most of the agents reported father-centered families; more social intercourse be-

Table 54. Increase in work of county extension agents with Mexican-Americans in groups between March 1964 and 1965

	Adult	Youth	Total
Number of groups	219	90	309
Number of individuals	4,196	2,187	6,383

tween families than was found in El Paso; the need for personal contacts between the Extension worker and the people to overcome slow acceptance of programs; the intense interest Mexican-Americans have in the welfare and future of their children; and their great appreciation of educational development.

Agents did not have time to attempt to evaluate methods with the population between the time they received the schedule and the time it was due in the state office. Consequently, "effectiveness" was a judgment of the county Extension worker and not a result of an evaluation of results with the Mexican-American populations. Table 55.

Circular letters and training leaders, in the order given, were considered to be "very effective" by a high proportion of agents.

"Other" methods recorded by agents were workshops and short courses, 29; personal instruction, 20; bulletin distribution and other handouts, 28; 4-H food groups, 14; home demonstration clubs, 13; etc. Agents listed work with groups such as adult education, business, Head Start, health and safety committees, literacy councils and preschool groups. Agents also reported using exhibits, surveys, telephone calls, film strips, method demonstrations, tours and office conferences.

Teaching plans for foods and nutrition with management integrated and for clothing with management integrated were developed by state specialists. Also developed were separate teaching plans for foods and nutrition, clothing and management. The plans included objectives, subject matter, demonstrations and other methods to be used, suggestions for posters, news releases, radio and television scripts, handouts, mailouts and evaluations. These plans were prepared for the El Paso Project but were distributed to all agents in these training workshops. On the evaluation schedule, agents were asked how many times they had used these plans and how many people attended meetings where they were used. Responses are shown in Table 56. This

Table 55. Times used and effectiveness of teaching methods used in 86 counties

Methods used	Times used	Degree of effectiveness: Very %	Not so very %	Little %	Total No.	Total %
Total counties					86	100
Radio programs	193	13	11	10	34	40
Home visits	134	2	2	1	5	6
Lessons (meetings)	1204	6	11	3	20	23
Circular letter	636	47	4	2	53	62
TV programs	133	20	7	7	34	40
Training leaders	848	42	7	4	53	62
Case studies	43	8	1	4	13	15
Others	157	18	6	2	26	30

Table 56. Use made of teaching plans in 86 counties

Teaching plans	Number of times used	Attendance when plans were used
Clothing	108	1,379
Foods & nutrition	240	3,898
Home management	81	1,034

Table 57. Most successful programs or activities in counties

Most successful activity/program		Number of counties
Foods and nutrition	Classes on nonfat milk use	2
	Table manners	1
	Workshops on foods & nutrition	16
	Nutrition meetings	15
	Free diabetic clinic detection	1
	Classes on problems in child care and feeding	4
	Sanitation in food preparation	3
Clothing	Clothing programs	11
	Lessons on basic clothing construction	9
	Grooming and health	3
Other	Money management	1
	How to use credit wisely	2
	Classes on home improvement	3
	Preschool nursery & Head Start Program	4
	Classes on family life	2
	Field trips for children & adults	2
	Committee on making games	1
	Recreation programs	1
	Flower arrangement	1
	Cake decoration	1
	Exhibit on health	1
	Home nursing classes	1
	Meetings on medicare	4
	Water testing project	1
	Wool preparation for the market	1
	Rifle safety programs	1
	General counseling	2
	Community projects	1
	Garden clubs	1
	Adult leadership	3
	Literacy council	1
	Newsletter circulation	2
	Radio presentations in Spanish	1
	Literature provided to county health and welfare workers	1

indicated that considerable extra utilization of these detailed teaching plans had been made.

By means of these plans, the specialists were able to reach some 100 counties in the state with materials from which agents could select small segments for radio and television or could conduct a series of workshops on given subject matter. It provided all of these agents at one time with the most recent subject-matter information available. Specialists' time was utilized more effectively by serving counties with lesson plans, and county agents' time was utilized more effectively by having recent subject matter on hand and "packaged" for effective use in a variety of methods. One county agent reported that he had used the pattern developed by these specialists for agricultural projects.

In carrying on or instituting programs with the Mexican-Americans, county Extension agents may have been limited only by time and their own imagination in ways and means of working with the population.

When asked to give a brief narrative report on the most successful activity or program effort in working with this audience, agents from the 62 counties gave a wide variety of responses. In 14 counties, agents said that there was no *one* most successful program, and in ten they said *all* such programs were successful. Table 57.

Section 7. Terminal Evaluation of Project
January 1968

SOCIAL AND ECONOMIC CHANGES

Between April 1964 and January 1968, land use and other economic and social changes took place which altered the proportion of private dwellings to public housing units within Areas I and II and the proportion of private dwellings between the two areas.

Private dwellings expanded by 250 units through new building and remodeling in Area I. A relatively new grade school and 270 private dwellings were eliminated from Area II by relocation of the Mexico-United States International Boundary. Some of the highest and lowest quality housing were eliminated and some remodeling took place to accommodate small business establishments located in proximity to the new port of entry. Throughout the time span of the project, the number of public housing units remained the same in both areas. Table 58.

These changes resulted in a 10 percent increase in private dwellings in Area I and a decrease of 18 percent in public housing in Area II. There were statistically significant differences between the percentages of public housing units and private dwellings within both areas and between the percentages of private residences in the two areas.

While the 1962 study revealed no significant differences between the two areas, it revealed a number of significant differences between the population living in private and in public housing. Because of the change in proportion of private dwellings to public housing units, characteristics of homemakers and situations of families as reported in 1964 showed different proportions from those in 1968 in both areas and in the relative effectiveness of Extension educational methods.

Table 58. Change in proportion of residents living in public housing and in private dwellings between 1962 and 1968 by area

	Area I		Area II	
1962	No.	%	No.	%
Total dwellings	795	100	823	100
Public housing	324	41	306	37
Private dwellings	471	59	517	63
1968				
Total dwellings	1045	100	553	100
Public housing	324	31	306	55
Private dwellings	721	69	247	45

During the period when homemakers were interviewed in 1968, a number of disturbing situations were affecting the population in metropolitan El Paso. A long and damaging copper industry strike adversely affected the total economy and many individual families. Widespread publicity suggesting a possible reduction in employment of civilians at installations of the military services in the interest of government economy threatened incomes of some families. In addition, a campaign to encourage high school completion of both youth and adults and job training as a means of improving incomes was under way. Publicity concerning government funds to improve the education of low-income children intensified the awareness of parents of the need for education of children when they were already under extreme economic pressure to provide bare living necessities.

Controversy concerning the closing of the border to Mexican Nationals who cross daily to work on the United States' side contributed to confusion. Through newspapers those favorable to closing the border contended it would provide jobs and raise incomes of workers the full length of the border on the United States' side. Those opposed to the closing contended it would adversely affect relations between the two countries.

In addition, much publicity over a long period concerning the War on Poverty instituted to improve their economic circumstances must have been a disturbing influence. Their circumstances had not improved over the period of this study;

rather, poverty had intensified for a high proportion of the families.

All of these factors contributed to the distress of many individuals who had no choices concerning the use of their meager incomes and no understanding of how they as families could improve their situations.

To raise incomes of the total population closer to or above what is considered to be the poverty level, job training will have to take place and the opportunity to earn wages that will support a family in the present economy will have to be provided. In addition, a decrease in the birth rate is imperative if one or two skilled or unskilled wage earners are to support the family unit. If this can be done, it still will be necessary to educate family members to utilize all family resources as efficiently as possible to help the family stay above the poverty level in a dynamic economy such as that of the United States.

FAMILY SIZE AND COMPOSITION

Between 1962 and 1968, the average family size in the combined areas dropped from 5.22 to 5 persons. Approximately 85 percent of the families in the two public housing units had an average of 3.4 children, while approximately 76 percent of the families in the private dwellings had an average of 3.7 children. Families were somewhat younger and had 11 percent more children under 5 years in public housing units. While fewer families in private dwellings had children, they had a slightly higher average number of children.

The population change of great concern to the total region and to other populations of like characteristics was the increase in the proportion of "other adults" relative to household heads and unmarried children under 21 years of age. The growth of this particular population relative to other family members in households in only six years and four months warns of a serious problem. In 1962 "other adults" in households constituted 4 percent of the total population and 10.14 percent of the adult population. By 1968 this population constituted 9 percent of the total population and 20.53 percent of the adult population. Table 59. "Other adults" slightly more than doubled relative to all adults over this comparatively brief time span, and the greatest increase was in families in private dwellings.

Table 59. Number of families with other adults and number and age of other adults by type of housing by area

Other adults					Area I				Area II			
					Public housing		Private dwelling		Public housing		Private dwelling	
Families No.	Families %	Persons No.	Persons %	Age group	Families No.	Persons No.	Families No.	Persons No.	Families No.	Persons No.	Families No.	Persons No.
91	100	132	100		9	10	52	78	14	20	16	24
				Under 20								
15	16	15	11	1 person	3	3	8	8	3	3	1	1
2	2	4	3	2 person			1	2	1	2		
1	1	3	2	3 person							1	3
				20 - 29								
29	32	29	22	1 person	2	2	18	18	2	2	7	7
13	14	26	20	2 person	1	2	8	16	2	4	2	4
1	1	3	2	3 person							1	3
1	1	5	4	5 person			1	5				
				30 - 59								
27	30	27	20	1 person	2	2	15	15	6	6	4	4
2	2	2	3	2 person			2	4				
				60 & over								
14	15	14	11	1 person	1	1	8	8	3	3	2	2
1	1	2	2	2 person			1	2				
			No.	%								
Total records			295	100	41	100	124	100	67	100	63	100
Families					9	22	52	42	14	21	16	25
With other adults			91	31								
No other adults			204	69	32	78	72	58	53	79	47	75

Note: Totals over 100—some families had persons in more than one age group.

In Areas I and II in private dwellings, "other adults" constituted 12 and 8 percent respectively of the population. In Areas I and II in public housing units, "other adults" constituted 5 and 6 percent respectively of the population. Some of this difference probably results from somewhat younger families and consequently fewer young adults in public housing units than in private dwellings.

Also, since public housing rent is based on family income, young people may leave home and try to get along on whatever they are able to earn or continue to live with the family and not disclose earnings rather than have the family subjected to increased rent. There is little job security in the work these young people can find and increased income may be short-lived.

A most serious situation concerning "other adults" in Mexican-American households is the high proportion of young people. In 1968, 64 percent of the "other adults" were under 30 years of age and 16 percent were under 19 years of age. The under 19 age group signifies married children and/or their spouses; otherwise, they would have been counted as part of the child population. An additional 23 percent of "other adults" were 30 to 59 years of age and 13 percent were 60 years of age and over.

Fourty-four households had one person under 30 years; 15 had two; two had three; and one had five. Also a few households had "other adults" in higher age levels. The number of households with children 15 to 19 years of age in 1962 and the number of wage earners during 1967 in conjunction with family incomes indicated that most of these youths were the 15- to 19-year-old children in 1962 who had reached adult status and were still living in the parental household in 1968. Also, it is clear that few held jobs or contributed significantly to family income.

A dominant trait of the Mexican-American culture is family solidarity. Families continue as cohesive units which cause family members to care for those unable to care for themselves regardless of the poverty experienced by the extended family.

This is bringing about a condition that may be insupportable in coming years. The child population is decreasing at a much slower rate than the population of "other adults" is increasing. As will be shown later, incomes were not adequate to support increased family size. Living space was crowded in 1962, and conditions had not improved. The rise in the Consumer Price Index and taxes from September 1962 through December 1967 surpassed income increase. A high proportion of the families did not receive enough income to provide a low-cost adequate diet in 1962, and by 1968 the situation had deteriorated markedly for most families.

For those experiencing increase in family size in conjunction with stable income and rising prices, the situation appears intolerable. As can be noted from the percentage of families with one to five children in the various age levels, a steady stream of children are coming on to replace or join the young "other adults" in families. The only feasible solution is to channel "other adults" under 30 years of age into wage-earning situations quickly. Individuals who have not been successful in some kind of work before they reach the age of 30 may not be able to adjust to the discipline of holding a job and earning a living.

EDUCATION OF MALE HEADS AND HOMEMAKERS

Fewer male household heads had entered high school in 1968 than in 1962, but this deterioration was accompanied by a very slight gain in those with some training beyond the high school level. In the study area, the educational level of homemakers remained about the same. However, in Area II there was a slight decline in the number of homemakers who had entered or completed high school.

AGE OF MALE HEADS AND HOMEMAKERS

Between 1962 and 1968, male household heads 60 years and over increased approximately 11 percent in the combined areas. In Area I there was a lower proportion of both male heads and homemakers in each of the age groupings under 40 years of age and a higher proportion in those 40 and over. This difference was less marked in Area II which had 19 percent more male heads under 40 years than Area I.

MARITAL STATUS

Households without male heads increased from 19 to 25 percent. Nineteen percent of the households in private dwellings and 37 percent in public housing had no male heads. Area II was somewhat more disadvantaged than Area I in this respect. This decline of male heads may be caused by a relatively high death rate of Mexican-Americans since the population, on the average, is aging. The 1960 Census data shows 75 percent of the families in the United States with Spanish surnames to be husband and wife households.

FAMILY INCOME

Incomes for 1967 varied slightly from those of 1962 for Areas I and II combined. Families with under $1,000 incomes remained at 6 percent. There was a decrease of 12 percent in families with incomes of from $1,000 to $2,499; an increase of 11 percent in those with incomes of from $2,500 to $3,499; and an increase of 1 percent in those with incomes of $3,500 and over. Table 60.

To compare 1962 with 1964 and 1967 average incomes for combined Areas I and II, incomes of $1,000 to $4,999 were computed. However, in the three years these income classes included about 80 percent of the households. The average income in 1962 of the families with incomes specified above was $2,770, and the per capita was $525. In 1967 the average income was $2,891, and the per capita was $578. This was an increase in average per capita income of slightly over $50 in six years.

Average family and per capita incomes are shown in Table 61 for all families in public housing and private dwellings in Areas I and II for 1967. Also, average family income and per capita for families with incomes between $1,000 and $3,500 are given. Private dwelling residents in Area I show $730 per capita which is the highest in both types of housing in both areas when computations are based on incomes of $1,000 to $7,999. However, the per capita income of 45 percent of these residents show a low of $466 for families with incomes of $1,000 to $3,499. Had it been possible to include incomes of under $1,000 in computation of average incomes, the average of residents in Area I in public housing would be far below the others. Six times as many families had less than $1,000 in public housing as in private dwellings, and no family received over $5,000 per year.

There was an average of 1.2 persons per household in Area I and 0.98 persons per household in Area II employed four months or more in 1967. Incomes above $3,500 were dependent largely upon earnings of other family members or other supplemental income in addition to earnings of the male household heads as described in Section 2. However, the probability that the same proportion of families will continue to benefit from earned income by male household heads in this population has decreased. Over this period, employed male household heads decreased 10 percent; households with no male heads increased 6 percent; and male heads

Table 60. Percentage of families in given income class and average incomes in 1962, 1964 and 1967—Areas I and II combined

	1962		1964		1967	
	Number	Percent	Number	Percent	Number	Percent
Total no. of records	300	100	313	100	295	100
Income of the family						
Less than $1,000	17	6	11	3	17	6
$1,000 - $1,499	25	8	28	9	30	10
$1,500 - $2,499	85	29	69	22	45	15
$2,500 - $3,499	67	22	99	32	98	33
$3,500 - $4,999	61	20	49	16	57	20
$5,000 and over	35	12	51	16	40	13
No response	6	2	6	2		
Don't know	4	1			8	3

1962 Average income: Family $2,700 Per capita $525
1967 Average income: Family $2,891 Per capita $578

Table 61. 1967 annual incomes in Areas I and II by type of housing

Income class	No.	%	Area I Public housing %	Area I Private dwelling %	Area II Public housing %	Area II Private dwelling %
Total number	295	100	100	100	100	100
Less than $1,000	17	6	12	2	8	6
$1,000 - $1,499	30	10	17	7	16	6
$1,500 - $2,499	45	15	10	11	21	23
$2,500 - $3,499	98	33	49	27	39	30
$3,500 - $4,999	57	19	10	29	7	19
$5,000 - $7,999	34	12		19	4	11
$8,000 & over	6	2		3		3
Don't know	8	3	2	2	5	2

1967 Average annual and per capita incomes of families receiving selected incomes

Income class	No.	%	Area I Public housing %	Area I Private dwelling %	Area II Public housing %	Area II Private dwelling %
Total number[1]	264	89	86	93	87	89
Average income of families with $1,000 to $7,999			$2,597	$3,870	$2,745	$3,330
Average per capita income			$ 552	$ 730	$ 546	$ 680
Total number[1]	173	59	76	45	76	59
Average income of families with $1,000 - $3,499			$2,476	$2,477	$2,370	$2,432
Average per capita income			$ 527	$ 467	$ 474	496

[1] Number of families in the designated income classes.

receiving pension or retirement funds increased 6 percent. In addition, 27 percent of the male household heads were employed as unskilled laborers throughout this period. Service workers increased 18 percent while earnings from skilled laborers, craftsmen, operatives, foremen and managers declined 11 percent. This indicates a loss in earning power of this minority group. Table 62.

The shift in type of employment indicates some deterioration in the employment situation of these Mexican-American workers. It is possible the labor market situation may have changed and competition for better paying jobs may be so great that the general education and job experience of this population make it impossible for them to compete with available labor in the El Paso metropolitan area.

During this period, the Consumer Price Index rose almost 13 points for all goods and services. (Appendix 4).

It would have been necessary for per capita incomes to rise 12.7 percent or to $651 for goods and services alone with no allowance for increased taxes for families to have the same spending power on the average for each person in 1967

Table 62. Number and percentage of male household heads employed in various occupations by years

Kind of employment	1962 No.	1962 %	1964 No.	1964 %	1967 No.	1967 %
Total employed	213	100	226	100	180	100
Unskilled laborer	58	27	59	27	49	27
Craftsman-skilled laborer	55	26	45	20	40	22
Operative	37	17	48	20	26	14
Service worker	18	8	50	22	46	26
Sales-clerical	29	14	13	6	8	5
Professional-foreman-manager	10	5	4	2	2	1
All others	6	3	7	3	9	5
Total records	300	100	313	100	295	100
Employed male heads	213	71	226	72	180	61
Unemployed	8	3	7	2	5	2
Pension or retired	16	5	19	6	31	11
No response	5	2	2	1	4	1
No male head	58	19	59	19	75	25

as they had in 1962. Families who had above average medical costs would have required a greater increase. Families with equity in property would have required a higher increase than renters. Also, families with older children who need more for education and recreation than those with young children only or no children would require a greater increase. Thus, consumer price rise does not penalize all families equally. While some suffered a greater deprivation than others, all were forced into deeper poverty by inflation.

FOOD SITUATION

The proportion of families spending an estimated amount for food per week at given levels changed little between 1962 and 1968. Only 3 percent more of the families spent $30 or more for food per week in 1968 than spent this amount in 1962. Table 63. During this period the Food Price Index rose from 103.8 to 116.2. Thus, the quantity of food available at 1968 price levels was well below that available in 1962 and more food was needed. Homemakers' responses concerning what they served their families during the 24-hour period prior to the interviews varied little in 1968 from those given in 1962. The quantity of milk consumed per person remained practically the same.

During this period the Food Stamp Plan was instituted in El Paso, and 14 percent of the families received stamps. Thus, more food was provided for the same expenditure for these families than had previously been available. For a family of five who had no food stamps and who spent $30 per week for food, the per person per meal allowance was 28½ cents; $20 per week allowed 19 cents; and $15 per week allowed 14 cents. Few homemakers in this population could provide families the quality and quantity of foods needed for low-cost adequate diets.

Table 63. Family expenditure for food last week

Amount	1962 No.	1962 %	1964 No.	1964 %	1968 No.	1968 %[1]
Total records	300	100	313	100	295	100
$ 5	8	3	10	3	9	3
$10	32	11	39	13	38	13
$15	61	20	66	21	47	16
$20	66	22	76	24	62	21
$25	57	19	47	15	57	19
$30 or more	73	24	68	22	78	27[2]

[1] One and 2 percents did not know or gave no response in each year.

[2] Seven percent, $40; 4 percent, $50 and over; 0.3 percent eats out.

Table 64. Communication equipment in working order in households by number and percentage by area[1]

Equipment	No.	%	Area I %	Area II %
Total	295	100		
Television	272	92	93	92
Radio	272	92	95	88
Telephone	158	54	66	37

[1] Horizontal columns do not total 100 because 1 percent gave no response and the remainder did not have selected equipment.

This points clearly to the fact that a poverty level cannot be defined in dollar income only. Family size, price levels and taxes must be considered.

COMMUNICATION EQUIPMENT

Communication equipment in households in 1968 requires consideration because of its powerful influence in making new knowledge available to this population. Table 64.

RESULTS OF PRESENTATION OF SELECTED SUBJECTS

No attempt will be made to cover all phases of program subject matter presented to the population over the period of the study. Only selected phases of a few subject-matter areas will be reported here.

Nutrition and Foods

The educational program throughout the project was concentrated on nutrition and foods, clothing, home management and family life. The nutrition and foods program was built around the four food groups necessary for growth and the maintenance of good health. In conjunction with this was education to promote food preparation which would preserve food nutrients and provide as varied a diet as income available for food would allow. In the study area, 87 percent of the homemakers knew something concerning the four food groups in 1968. This was a sharp contrast to the 5 percent who said they knew something about the food groups in 1962. Fifty-two to 78 percent of the homemakers were able to name from one to three, and 42 percent named all four food groups in 1968. Table 65.

Between 8 and 12 percent of the homemakers had attended classes on some phases of the nutrition and foods program. Forty-two percent said they had learned something which caused them to cook differently. Thirty-four percent said they had prepared one or more selected dishes which the home demonstration agent had demonstrated in classes and publicized through mass media. Soups and stews had been prepared by 12 percent of the homemakers; meats, 8 percent; vegetables, 7 percent; and breads and cereals, 1 percent. Complete meals prepared in meal planning classes had been prepared by 2 percent of the homemakers for their families. Homemakers who had learned to prepare foods differently were distributed throughout the various income levels.

The numbers of both adults and children who were said to have milk two or three times per day were higher in 1968 than in 1962. However, the quantity of milk per person said to be purchased by families was the same for both 1962 and 1968. Thus, family size and quantity of milk purchased was about the same, and income spent for food had increased little between 1962 and 1968. The knowledge of how much milk individuals needed for good health may have been reflected in responses of homemakers. Less than 1 percent of the households purchased no milk in 1968.

Households in which powdered milk was used increased from 4 to 12 percent. From the proportion of homemakers who used powdered milk in a variety of ways taught by the home demonstration agent and the methods recognized as the source of information, it is probable that this increase resulted from the Extension program.

Table 65. Homemakers who could name one or more of the four food groups by year

Groups named	1962 No.	1962 %	1964 No.	1964 %	1968 No.	1968 %
Total	300	100	313	100	295[1]	100
Milk	5	2	176	56	221	75
Meat	6	2	185	59	229	78
Vegetable & fruit	2	1	172	55	191	65
Bread & cereal	3	1	124	40	153	52
All 4	1	[2]	92	29	123	42

[1] Columns do not add to totals because of duplications and omissions of negative responses.

[2] Don't remember any—less than one-third of 1 percent.

Table 66. Percentage of homemakers who saw and/or heard programs on food buying and storing and selected practices adopted—Area I

Saw/heard programs	Area I No.	Area I Percent
Total	165	100[1]
Food buying	62	38
Food storage	98	59
Food for the holidays	58	35
Adopted practices		
Food buying		
Read advertisements	20	12
Buy in large quantity	8	5
Compare prices	48	29
Compare weights	27	16
Consider food loss in cleaning	9	5
All other	13	8
Food storage		
Made changes in methods of storing	89	54
Refrigerate in plastic bags	33	20
Refrigerate in covered glass jars	39	24
All other	13	8

[1] Percents do not add to 100 because of duplications.

Only 1 percent of the individual family members had no breakfast during the 24-hour period prior to the interview. Homemakers were asked if they served juice or fruit rich in vitamin C each morning for breakfast, and approximately two-fifths said they "usually" did, and the same proportion said they "sometimes" did. A fifth said they "seldom or never" served this food for breakfast. The need for vitamin C foods in the diet was emphasized in the program and low-cost sources were cited.

Another phase of the program was food buying. More than a third of the homemakers said they had seen or heard information on buying foods. When asked what they had learned that had helped them in food buying, they responded with a variety of practices: learned to read advertisements; compare prices; compare weights; buy in large quantities; and shop at different stores. Table 66.

A program on storing food to keep it fresh and free of insects had been seen or heard by 59 percent of the homemakers who were distributed throughout all age levels and income classes. More than half of the homemakers said they had made changes in the way they stored food after seeing and hearing the program. Twenty-four percent had adopted the practice of refrigerating food in glass jars with covers, and 20 percent used plastic bags as recommended.

"Food for the Holidays" was included in the Extension program each fall during the project, and slightly more than a third of the homemakers said they had seen or heard it.

Home Management

A program on controlling household pests was a joint effort of several agencies. The Public Housing Administration was assisting in public housing units for a small monthly charge, homemakers said. Seventy-two percent of the homemakers in both Areas I and II had seen or heard the programs. Sixty-nine percent in Area I and 70 percent in Area II said they had tried some product or method recommended for controlling household pests. Of the 72 percent exposed to information, only 3 percent in Area I and 2 percent in Area II took no action. The methods of ridding households of pests varied widely. Some homemakers said they had improved cleanliness in the home, and some named a commercial firm of exterminators. However, a wide variety of commercial products was named by homemakers who said they had used them.

Other phases of the management program reached varying proportions of the population. Almost a third of the homemakers said they received information which helped them to manage their money more efficiently. Also, 28 percent said they had been able to hold some money for savings or an emergency fund since they had heard the programs. In response to questions concerning improved buying practices, homemakers referred to many different food products and clothing. Twenty-four percent had bought some kind of pots and pans, and most had considered the four guiding principles taught in relation to purchases of this kind of equipment. Thirty percent of them said they had seen or heard about planning household work, and 27 percent of these said other family members had helped more in keeping the house neat and clean since they had heard the programs.

An extremely important phase of the management program related to buying "on time" or installment credit. Fifty-eight percent of the homemakers said they had made installment purchases in the last few years. From 52 to 55 percent had used five of the six practices stressed in the programs, and 45 percent said they had used the sixth point before making a purchase. Thirty-three percent said they had gone to more than one place to find out what the cost of credit would be.

The six points stressed in teaching were: dollar cost of the article; dollar cost of credit; number of payments to be made; total dollars in payments; total number of installment payments; and what would happen if the family were unable to make payments.

Clothing

Phases of the clothing program varied little during the period of the project. Thirty-eight percent of the homemakers had seen or heard information concerning buying clothing that would wear longer, fit better and give more satisfaction. Almost half of the homemakers said they had been invited to attend clothing classes, and 16 percent said they had attended some classes. Five questions were asked in an effort to determine what learning had taken place in clothing construction. From 4 to 15 percent of the total population answered the various questions correctly. From 6 to 11 percent of the homemakers had used the knowledge and skill obtained to make clothing for themselves and for members of their families and to repair and refit garments. A few homemakers had learned enough to be able to assist neighbors and friends in simple construction techniques.

From 59 to 78 percent of the homemakers were able to give the most important body measurements to consider when purchasing ready-to-wear garments or patterns, and other information on buying clothing and fabrics had aided 38 percent of the homemakers.

Buying of children's clothing and shoes reached approximately 30 percent of the population and was of great help to those who received it. This phase of the work did not change materially between 1964 and 1968 and is reported in Section 2.

RELATIVE EFFECTIVENESS OF METHODS

The major objective of this project was to determine methods which most effectively brought change in knowledge, skills or attitudes of Mexican-American homemakers and their families. Consequently, concentrated effort was made to determine methods by which homemakers had learned new knowledge and skills; to what extent homemakers were aware of the source of information provided them through different methods; and to what extent local leadership had emerged in the project areas.

Homemakers' responses concerning methods by which they had learned about the four food groups placed the four most effective methods as follows: television (34 percent); mailed letters and leaflets (33 percent); newspapers (30 percent); and classes (8 percent). In 1964, mailed letters with literature was the method which reached the highest proportion of the homemakers in Area I. At that time 71 percent who had received information said it was from letters. Television, classes and newspapers followed in the order given. In Area II, in which homemakers were not mailed literature and classes were not held, television was instrumental in bringing information to 42 percent of the homemakers and newspapers and posters each accounted for 25 percent of the knowledge extended to them.

This shift in effectiveness of methods resulted at least in part from the change in proportion of homemakers housed in private dwellings and public housing units. However, other forces must have had some influence. Over the time span, many homemakers may have forgotten the source of information concerning the food groups and responded in relation to recently seen and heard information. The continued deepening poverty may have caused a shrinking away from face-to-face contacts such as classes bring.

Fourteen questions were asked on selected subjects in interviews concerning learning which was believed to be a highly probable consequence of Extension teaching. Three additional questions were asked concerning learning which could have been the result of the combined efforts of other agencies, business establishments and the Extension Service. Each of these 17 questions were followed by questions concerning methods by which information had been gained by the respondents; 15 were followed by a question concerning who had been instrumental in making the information available to the respondents.

A weighted number to show the relative effectiveness of methods was computed from the responses of homemakers to the 17 questions concerning methods by which they had learned about these subjects.

The four top methods were determined for each subject, and the number of times each fell from first to fourth place was weighted by 4 for the top number and down to 1 for the number in fourth place. The numbers were totaled and averaged, and the four most influential methods were expressed as a percentage of the total number of records for each area and for the combined areas except for letters and classes which were not made directly available in Area II. Table 67. Not included in the table are responses which show from 1 to 12 percent of the homemakers in Area II received information in classes and from 1 to 3 percent saw letters which were sent to them or were passed to them by homemakers from Area I.

The project extended over six years, and homemakers responded with the method they remembered regardless of when learning took place. The subject matter pursued most intensively throughout the study was foods and nutrition for family health based on the four food

Table 67. Relative effectiveness of the four high methods—Areas I, II and combined areas

Methods	Area I No.	 %	Area II No.	 %	Comb. areas No.	 %
Total records	165	100	130	100	295	100[1]
Mailed letters	55	33				
Television	56	34	44	34	100	34
Newspapers	49	30	24	18	73	25
Classes	19	12				

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[1] Columns do not total 100 because of methods not reported here; methods not identified by respondent and those who accredited knowledge to "myself."

groups, utilizing all of the methods available under the circumstances in the locality. On this subject, 87 percent of the homemakers were reached by some method or methods in Area I, and 59 percent were reached in Area II. Considering the economic circumstances and other situations, the change in knowledge of homemakers in the combined areas relative to the four food groups is positive evidence of the willingness and ability of homemakers to learn under extremely adverse circumstances.

To further clarify the effectiveness of methods, the six subjects on which the highest proportion of homemakers said they had information were tabulated separately, and all of the methods used except posters and exhibits are shown in Table 68. Posters and exhibits made very low impact in 1968 although they were of importance relative to selected subjects in the 1964 evaluation.

Intensity of application of methods to the different subjects varied, and under different degrees of intensity of application from the ones used, results would vary. The only conclusive statement that can be made concerning effectiveness of methods is that in a community where many disorganizing economic and social factors were taking place, mass media were more effective in reaching a high proportion of the population than other Extension methods.

However, since some needed information could not be extended through mass media, it is important to consider that 39 percent of the homemakers in Area I attended one or more classes. While no classes were held for those in Area II, 25 percent of them attended one or more classes held for Area I homemakers. Also, while home visits showed a very limited influence in the 1968 survey, they were of significance relative to selected subjects as shown in 1964. The agent was known and recognized by homemakers through home visits which served also to inform homemakers concerning the Extension program and the source of information extended to them.

WHO MADE INFORMATION AVAILABLE

Professional Workers

The home demonstration agent was recognized as the source of information by up to 30 percent of all homemakers for selected subjects. Foods and nutrition and clothing were the subjects for which the highest proportion of homemakers recognized the home demonstration agent as the source of information. Some homemakers learned to call the county Extension office for needed information during the period of the project.

One difficulty encountered with homemakers of this socioeconomic population was their reluc-

Table 68. Methods accorded as source of information on the six subjects which the highest number of homemakers had heard about and/or seen by area

Six subjects[1]	Total No.	Total %	Letter %	TV %	Newspaper %	Visit %	Radio %	Class %
Area I								
Total records	165	100	100	100	100	100	100	100
Four food groups	145	87	22	21	17	4	7	17
Insect control	118	72	7	39	21	2	8	2
Job Training	113	68	12	35	28	6	6	5
Buying on credit	96	58	22	12	5	3	3	2
School dropouts	94	57	8	19	28	5	8	3
Food storage	87	53	12	24	12	3	5	7
Area II								
Total records	130	100	100	100	100	100	100	100
Four food groups	97	75		27	18	2	2	12
Insect control	93	72	1	35	15	10	8	5
Job training	72	55	2	25	22	4	5	8
Buying on credit	62	48	3	18	7	1	1	2
School dropouts	64	49	2	25	25	5	4	7
Food storage	64	49	1	28	10	1	9	5

[1] Horizontal columns do not add to totals because of duplication; methods not identified; more than one method given by some; and knowledge credited to "myself."

tance to say they "did not know." They responded affirmatively to learning, but in many instances they said "myself" in response to all sources of information. Many who did not resort to this said they "did not remember" as opposed to they "did not know." An average of 13 percent in Area I and 15 percent in Area II said they "did not remember" compared to 1 and 2 percent who said they "did not know" or gave no response. This was true especially of subjects related to food preparation and others which homemakers may have thought they should know.

Leaders and Others

The 1962 study disclosed that homemakers in the study area had almost no social contacts aside from the extended family and the Church (not church-related groups). Community leaders were needed to encourage social contacts between families and to aid in extending information to families. Consequently, development of leadership was an objective of the project. However, the 1968 final evaluation revealed little to indicate any appreciable amount of leadership development. Homemakers were asked if they had, in any way, assisted with the program. About a third of them said they had invited other homemakers to attend classes, passed on information and helped with arrangements for meetings. However, only one woman in each area said that a "helper" had provided information to her. Homemakers were asked if they knew anyone in the community who had assisted with a program on homemade toys for children which was given yearly before Christmas, and 12 homemakers responded with the names of ten local women. No other question related to leadership brought a response as high as this.

One woman had served as a local leader and was continuing as a 4-H Club leader for a small group of girls when the project terminated.

Leadership had not developed beyond that which could be recognized by homemakers in the community as neighborly helpfulness in simple clothing construction, food preparation and a few other practices. "Neighbors and friends" were accredited with providing information on the 17 subjects investigated, and the average of such responses was 8 percent. In Area I, 16 percent of the homemakers said "neighbors and friends" had provided information on pest control, and 12 percent said they had provided information on the four food groups. In Area II, the range of responses on the questions was from 1 to 9 percent and the average was 5 percent. Adult relatives had made a similar contribution.

KNOWLEDGE CONCERNING THE COMMUNITY AND AGENCIES WORKING ON COMMUNITY PROBLEMS

To determine the awareness families had of community facilities available to them and the use families made of such facilities, homemakers were asked if anyone in the family "used or went to" selected facilities. Responses show that public health clinics were used by 56 percent of the families; libraries by 60 percent; recreation center by 44 percent; and parks by 57 percent. Four percent had used the county Extension office, 2 percent specified "other" but did not designate what they were and 13 percent said they used none.

Concerning organizations or projects established to work toward improvements of education of youth and adults and specifically for improved job opportunities, 72 percent of the homemakers had heard about Project Bravo,[1] 24 percent knew about the efforts of LULAC,[2] and 11 percent about Barrio[3] workers. Recognition of the work of other organiations was meager. Few homemakers knew how to get information concerning education. Homemakers were asked who provided information on job opportunities and 19 percent said Office of Economic Opportunity programs; 2 percent, Texas A&M University; and an additional 2 percent, Burleson School.[4] Seventy-eight percent did not know information was available or where to get it.

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[1] *Supra,* p. 23.
[2] League of United Latin-American Citizens.
[3] A group of personnel associated with Project Bravo.
[4] Local public grade school.

Section 8. Program Implications

This project initially had a cross-cultural focus, and it soon became evident that a low-income dimension also was present. For this reason, it was not always possible to attribute causative factors clearly to cultural differences or to economic differences between the study population and that of the larger population of which it was a part.

Of all the methods tested, two clearly stood out as most productive in extending information to this population — the circular letter and the home visit. Television and classes (meetings) also were found to be relatively effective methods.

The data showed that the circular mailed periodically to homemakers was very effective in bringing about changes in awareness. Homemakers apparently appreciated receiving the letters and looked forward to them. A possible explanation is that this population received little mail. This was observed by the first project worker and others. Because of limited economic resources, it was assumed that members of this group were less likely to appear on mailing lists of business concerns. The letters used in the project were addressed to homemakers by name which may have served as a form of personal recognition. The material was always presented in both Spanish and English which may have indicated to the recipients that someone recognized their language problem. The letters were simple, well illustrated and each focused on one major teaching point. They were especially useful when used in support of other methods, such as calling attention to television programs or classes which the Extension agents were presenting or conducting.

The value of circular letters in imparting information to homemakers of low-income families was also established in studies conducted in Kansas City[1] and Boston.[2]

One finding that could be more clearly attributed to a difference in cultural values was the homemakers' attitude toward the terms "meetings" and "classes." Historically, the Cooperative Extension Service has not utilized the term "class," reserving this term to describe learning situations in formal educational institutions. The Cooperative Extension Service, because of its informal educational orientation, has tended to use the term "meeting" to describe group learning situations where the educator arranged for learning experiences for the participants in a face-to-face situation.

In the conduct of the El Paso Project, it was noted that Mexican-American homemakers reacted more positively to the term "classes" than "meetings" even when the terms could have been used interchangeably. Apparently, the former connoted to them more of an educational situation; the latter, more of a social one. Others have described the Mexican culture as patriarchal. This was borne out by homemakers in the project area who advised the agent that wives usually sought their husbands' permission to attend activities outside the home and that such permission was easier to obtain for an educational function (i.e., classes) than for social functions (i.e., meetings).

Members of this cultural group have a high concern for their children. Children (or subjects having to do with children) afforded an entree with individuals and into homes when other approaches met with little or no response. For example, there was noted a great interest and concern for children's clothing. It was demonstrated that this interest could be utilized effectively in interesting homemakers, and after the initial educational work on the care, buying and construction of children's clothing was completed, the stage was established for other kinds of programs.

Although many members of this population are bilingual, this faculty may be true only insofar as the spoken language is concerned. Literacy may be nonexistent or at least limited in either language. This was attested to by the large number in the study population who had only a few years of formal education. Many speak Spanish well and English poorly, but because of their formal educational experience in the United States, they are able to read English and not Spanish. In fact, the findings of this project showed that varying combinations exist in terms of individual faculty with the two languages. Obviously, this indicates that great care is needed in the preparation of written materials. Such materials should be simple, clear and well illustrated.

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[1] Starley Hunter, *et al., Families in an Urban Enclave,* Report on Leeds Dunbar Community, Kansas City, Missouri, 1965 (Columbia, Missouri: University of Missouri, Extension Division, 1965).

[2] Starley Hunter, *et al., The Families and Their Learning Situation,* Report on South End Housing Development, Boston Massachusetts, 1965 (Amherst, Massachusetts: Cooperative Extension Service, University of Massachussetts, 1965).

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The potential of television as a method for reaching this audience is great. Even with the low and very low income situations, many families in the study area (92 percent of the homes) had television sets. The limited social mobility of most homemakers, because of the cultural situation, large families and limited economic resources, indicates that their main contact with the larger world is through television. This project indicated that in Area II, where no direct effort was made to reach homemakers with the educational program, television was the most effective means for informing homemakers. The effectiveness of TV is enhanced when programs are conducted by a known personality and when they are well publicized in advance by letter, poster and other means.

Another significant point was that as income decreased the transference of knowledge from neighbors and friends decreased. At the lowest income levels, this kind of carry-over effect was almost nonexistent. As the economic circumstances became more difficult, the more the homemakers withdrew from participation in public encounters.

When attempting to reach a mass audience, the home visit, even though individually effective, is a slow and expensive means for bringing about changes generally. However, it is important in gaining the confidence of the people, and as a result makes other methods such as meetings, television programs and circular letters more effective than they otherwise would have been. The home visit doubtlessly serves a real purpose in getting a program introduced initially.

Dietary deficiencies were more limited by the economic situation than by cultural patterns. Essentially, the deficiencies noted were the same as those of other groups who were in similar economic situations. Diets were generally low in vitamins A and C, and a large portion of the total protein was obtained from nonanimal sources.

There was little interaction among families living in public housing facilities with families living in private housing in the immediate surrounding area. This suggests that programs need to be developed and conducted separately for each of these groups.

Interaction among members of the extended family appears to be greater for this group than for the members of the dominant Anglo-American culture. Thus, information diffusion among relatives probably constitutes a more important channel of communication than neighbors and friends.

Although local leadership was not developed to the extent hoped for in the project, there definitely is a potential for such development. It should offer even greater potential as acculturation progress and as educational levels rise.

A highly regarded value of this population as well as that of the population as a whole is that of home ownership. In analyzing the data, especially that obtained from the case studies of family expenditure patterns, the appropriateness of this value could be questioned. In many cases this ideal was sought at great personal and family sacrifices. In one of the case studies, a low-income family was devoting 53 percent of its total income toward payments on the home. Because of the low total income, the family was depriving itself of even the barest of necessities, including food; yet, it was faced with the very real and immediate prospect of losing its home. In another case, a family which had not too dissimilar overall financial situation was only utilizing 13 percent of its total income for housing by renting a unit in a public housing complex. Should the cultural value of home ownership be challenged or at least questioned in the educational programs that are conducted for low-income families?

The conduct of this special project clearly showed that Mexican-American families can be reached with Extension educational programs. It was found that certain methods are more effective than others in bringing about desired behavioral changes. An educational program, to succeed with this population, must consider the cultural values of the people and the economic circumstances in which they find themselves.

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Appendixes

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APPENDIX 1

Overall Schedule of Major Planned Activities and Other Teaching Experiences

May 24, 1965 - May 31, 1966

Date	**Activity**
June 65 - May 66 (Entire Period)	Thursday of each week will be reserved for *planning and conducting home visits* during the entire period of this plan.
June 65 - May 66 (Entire Period)	*"Helpers"* will be trained on a continuous basis so they in turn can teach other members of extended family groups or neighbors throughout this period. They will help others in food, clothing and management.
June 65 - May 66 (Entire Period)	*Radio programs* will be arranged throughout this period.
May 24, 1965	*Circular letter* with teaching point on vitamin C and announcing TV program of June 2 on vitamin C.
June - August 1965	During summer, associate agent will visit homemakers informally and encourage their participation in activities, like the sewing machine clinics.
June 1 - 30, 1965	*Poster* with teach point on sewing machine care and announcement of sewing machine clinic to be held June 22, 23 and 24.
June 2, 1965	*TV program* with teaching point on vitamin C.
June 10, 1965	*Home visits* — first visits will be to the 90 homemakers who received the MP-651 bulletin on family relations by mail during November 1964 for the purpose of determining use made of information.
June 11, 1965	*Circular letter* with teaching point on care of sewing machine and announcement of sewing machine clinic to be held June 22, 23 and 24.
June 16, 1965	*TV program* with teaching point on care and maintenance of sewing machine.
June 22 - 24, 1965	*Clinic* — care and maintenance of sewing machine.
Week of June 28 Week of July 5 Week of July 12 Week of July 19	*Classes* — series of four (one day each week) on construction of children's clothing.
July 1 - 31, 1965	*Exhibit* with teaching point on vitamin C.
July 26, 1965	*Circular letter* on buying children's clothes (shoes) and announcing TV show of August 4 and 18.
August 1 - 31, 1965	*Exhibit* on buying children's clothes (general).
August 4, 1965	*TV program* on buying children's clothes (general).
August 18, 1965	*TV program* on buying children's clothes (shoes). (Mary Routh to prepare outline)
September 1 - 30, 1965	*Exhibit* on laundering methods.
September 6, 1965	*Circular letter* on laundering methods. Include announcement of September 14, 15 and 16 sewing machine clinic.
September 14 - 16, 1965	*Clinic* on care and maintenance of sewing machines.
October 1 - 30, 1965	*Exhibit* on money management.
October 4, 1965	*Circular letter* on money management. Announce TV series October 11-15 and classes October 18 - November 15 on money management.
October 11 - 15, 1965	*TV programs* — series of five consecutive programs on money management (preferably each day of this week).

Week of October 18 Week of October 25 Week of November 1 Week of November 8 Week of November 15	*Classes* — series of five on money management based on findings of study and case studies.
November 1 - 30, 1965	*Exhibit* on toys for Christmas.
November 15, 1965	*Circular letter* on making toys for Christmas. Announce November 23 workshop and December 1 TV program on making toys.
November 23, 1965	One *workshop* on making toys for Christmas to help families with gift problems for children and to reach homemakers not reached in previous classes.
December 1 - 31, 1965	*Exhibit or poster* on food for holidays.
December 1, 1965	*TV program* on making toys.
December 9, 1965	*Circular letter* on vitamin C and foods for holiday season. Announce TV show of December 15 on foods.
December 15, 1965	*TV program* on foods, vitamin C and foods for the holiday season.
December 27, 1965	*Circular letter* on selection and buying of food. Announce TV show on January 5, 1966, and classes January 10 - February 4 on foods.
January 1 - 31, 1966	*Exhibit* on selection and buying of food.
January 5, 1966	*TV program* on selection and buying of food.
Week of January 10 Week of January 17 Week of January 24 Week of January 31	*Classes* — series of four on selection and buying of food.
February 1 - 28, 1966	*Exhibit* on money management.
February 7, 1966	*Circular letter* on money management. Announce TV programs February 14 - 18 and February 21 - March 25 classes on money management.
February 14 - 18, 1966	*TV programs* — series of five consecutive programs on money management.
Week of February 21 Week of February 28 Week of March 7 Week of March 14 Week of March 21	*Classes* — series of five on money management.
April 1 - 30, 1966	*Exhibit* on good nutrition.
April 11, 1966	*Circular letter* on nutrition teaching point. Announce TV program on April 20 and April 18 - May 13 classes on foods.
April 15, 1966	*Fiesta* — related to nutrition classes.
Week of April 18 Week of April 25 Week of May 2 Week of May 9	*Classes* — series of four on nutrition.
April 20, 1966	*TV program* on good nutrition.
May 1 - 31, 1966	*Poster or exhibit* on career exploration.
May 9, 1966	*Circular letter* on careers and announcing May 20 general meeting on career exploration.
May 20, 1966	*General meeting* on career exploration for students of Area I and their parents.

Plan for Use of Circular Letters

May 24, 1965 - May 31, 1966

1. Penalty mail will be used for circular letters instead of postage paid.
2. There will be a continuation of using one main idea for each circular letter and material will be simple.

May 24, 1965	Teaching point on vitamin C and announcement of TV program on June 2.
June 11, 1965	Teaching point on care and maintenance of sewing machine and announcement of sewing machine clinic to be held June 22, 23 and 24.
July 26, 1965	Teaching point on buying children's clothes (shoes) and announcement of TV program on August 4 and August 18.
September 6, 1965	Teaching point on laundering methods (to be prepared by Wanda Meyer). Include announcement of September 14-16 sewing machine clinic.
October 4, 1965	Teaching points on money management and announcement of TV series on October 11-15 and classes October 18 - November 15.
November 15, 1965	Teaching point on making toys and announcement of workshop on November 23 and TV program on December 1 on making toys.
December 9, 1965	Teaching point on vitamin C, food for the holiday season and announcement of TV program on December 15 on foods.
December 27, 1965	Teaching point on selection and buying of food and announcement of TV program on January 5 and class series on January 10 - February 4.
February 7, 1966	Teaching point on money management and announcement of TV series February 14 - 18 and class series on February 21 - March 25.
April 11, 1966	Teaching point on good nutrition and announcement of food fiesta on April 15, nutrition class series April 18 - May 13 and TV program on April 20.
May 9, 1966	Teaching point on careers and announcement of general meeting on careers May 20.

Plan for Classes and Workshops

May 24, 1965 - May 31, 1966

June 28 - July 23	Series of four classes (one day each week, on construction of children's clothing. These will be conducted for homemakers and girls who have not participated in previous classes. "Helpers" may receive further training in these classes. (Use previously prepared lesson plans and materials.)
October 18 - November 19	Series of five classes on money management. (Lesson plans to be prepared by Starley Hunter, Louise Mason, Mary Routh and Wanda Meyer.) Order of Series: 1. Introduction — stage setting for subsequent sessions 2. Food and money management 3. Clothing and money management 4. Care of clothing and money management 5. Summarize — tie back to first session
November 23 Workshop	Making toys for Christmas. (Leaders will conduct — possibly from home demonstration clubs in county.)
January 10 - February 4	Series of four classes on selection and buying of foods. (Use previously prepared lesson plans and materials.)
February 21 - March 25	Series of five classes on money management. (Use materials prepared previously.)
April 18 - May 13	Series of four classes on nutrition. (Use previously prepared lesson plans and materials.)

Plan for Use of Television Programs

May 24, 1965 - May 31, 1966

June 2, 1965	One program on vitamin C in diet.
June 16, 1965	One program on sewing machine care and maintenance.
August 4, 1965	One program on buying of children's clothes (general).
August 18, 1965	One program on buying of children's clothes (shoes).
October 11 - 15, 1965	Series of five programs on overall money management (preferably one program each day for five consecutive days during this week — based on family case studies).
December 1, 1965	One program on making toys for Christmas.
December 15, 1965	One program on foods — vitamin C and foods for the holiday season.
January 5, 1966	One program on the buying and selection of foods (with appropriate management aspects included).
February 14 - 18, 1966	Series of five programs on overall money management (preferably one program each day for five consecutive days).
April 20, 1966	One program on value of good nutrition.

Plan of Conduct of Home Visits

May 24, 1965 - May 31, 1966

1. During the entire period of this plan (May 24, 1965 - May 31, 1966), Thursday of each week will be reserved for planning and conducting home visits.
2. Objectives for these visits are to:
   a. Become acquainted with other homemakers and determine needs as perceived by homemakers in Area I.
   b. Evaluate use of materials mailed to homemakers.
   c. Locate influential people in Area I.
   d. Further train homemakers who have attended classes and who have agreed to pass information along to others of kinship, friendship and/or neighborhood groups.
   e. Evaluate current training being conducted.
   f. Determine, if possible, social groupings (kinship, groups, etc.).
3. A record system will be maintained in the office on each homemaker visited which will reflect when visit was made, points discussed and other pertinent information.
4. Within Area I, small subareas are to be identified so that a few people in each of these areas will be visited.
5. A listing of questions and points to be covered in each visit will be made before the visit is conducted (e.g., whom to go to for help).
6. Some informational written material should be left with homemaker visited.

Plan for Use of Posters and Exhibits

May 24, 1965 - May 31, 1966

During the first to the tenth of each month in the housing area, move to church or other areas from housing project — use teaching point on each and use handout with each poster exhibit.

1965	June	Teaching point on sewing machine care and announcement of sewing machine clinic on June 23-25 (plan to be developed by Mary Routh).
	July	Exhibit with teaching point on vitamin C.
	August	Exhibit with teaching point on buying shoes (plan to be developed by Mary Routh). Also, announce forthcoming classes or workshop.
	September	Exhibit laundering methods (plan to be developed by Wanda Meyer).
	October	Money management — (plan to be developed by Wanda Meyer). Also, announce forthcoming classes or workshop.
	November	Toys for Christmas — also announce forthcoming classes or workshop.
	December	Food for the holidays.

1966	January	Foods — selection and buying. Also, announce forthcoming classes or workshop (plan to be developed by Wanda Meyer).
	April	Good nutrition — also, announce forthcoming classes or workshop.
	May	Career exploration.

Plan for Use of Radio

May 24, 1965 - May 31, 1966

Efforts will be made to use radio throughout this period. Information on best buys in foods and other appropriate information will be disseminated via radio. The development of short tapes which can be used several times will be explored. Also, the possibility of using more of the tapes prepared by Extension specialists at College Station will be investigated. The use of this method will be coordinated closely with the regular Extension educational program in El Paso County. (Specialists will suggest prepared tapes that can be used appropriately.)

Plan for General Meetings, Clinics and Workshops

May 24, 1965 - May 31, 1966

Clinics

June 22-24, 1965	Sewing Machine Clinic
September 14-16, 1965	Sewing Machine Clinic

Explore outside resources to help — goodwill industries and sewing machine company representatives. Adults who own machines should stay with machines. Minnie Bell and helpers should be there to assist and work with participants on operation of sewing machines. Mimeograph handout should be distributed on the A B C's of machine manufacturer. This will be prepared by Mary Routh.

Workshop

November 23, 1965	One-day workshop on making toys for Christmas.

General Meetings

April 15, 1966	Food fiesta (Louise Mason to assist in planning)
May 20, 1966	Career exploration — general meeting for students of Area I and their parents

Plan for Development of "Helpers"

May 24, 1965 - May 31, 1966

During the entire period (May 24, 1965 - May 31, 1966), efforts will be made to identify influentials and others who will share information gained with others of kinship, friendship and/or neighborhood groups. "Help" will be provided others in foods, clothing and management. "Helpers" will be loaned small items of teaching equipment, if needed, in order to assist those whom they help.

Plan for Evaluation

May 24, 1965 - May 31, 1966

Clothing

- When clothing classes are completed, ask the women to test teaching points they learned for the first time and the ones they learned to do better.
- Three to six months after clothing classes, ask the homemakers attending the number and kinds of garments that have been made. Tell participants at the end of the series that they will be asked to make this report.
- Ask helpers to keep a record of the number of women helped and the name and address of those helped.

Foods and Nutrition

- At the beginning of each class, ask the homemakers to tell what they learned the week before and what new or different foods they have tried.
- At the end of a three-month survey, ask those participating to see what they have learned. Base the survey on teaching points.
- The helpers should keep records of people talked with.

APPENDIX 2

Case Studies of 1964 Family Incomes and Expenditures Of Mexican-American Families

To provide Extension staff members with a better working knowledge concerning family situations of Mexican-Americans, a sample was drawn from the families interviewed in the 1964 study composed of husband and wife families with from three to seven children.

One of the bilingual women who participated in the study interviews was trained to obtain information from homemakers by the *recall* method. Case studies were developed by combining the information from the 1964 schedules with the expenditure information.

Case Study 1

The family was composed of husband, wife and seven children. The wife was in the 30- to 39-year-age group, and the husband was in the 40 to 49 group. The wife had completed some grade between the fifth and the eighth in school, and the husband had completed the fourth grade or less in the United States. They lived in a public housing apartment.

The husband was the only earner in the family and was employed as a construction laborer. He earned $2,597 in 1964. This was the only income, and it allowed a per capita income of $288.

When the expenditure schedule was taken in January 1965, the homemaker said they spent approximately $30 per week for food; however, when the evaluation schedule was taken in February 1964, she reported they spent from $15 to $19.99 per week for food. If $22.50 is assumed spent per week for food, this would allow $1,206 per year, an average of 13 cents per meal per person. The evaluation schedule shows that the family bought 16 large cans of evaporated milk, under 2 pounds of cheese, 3 to 6 pounds of meat and 10 or more pounds of dried beans per weak. At 6 pounds of meat, this would give a per person average of 11 ounces per week.

The day before the interview (Evaluation Study) the family had been served the following foods: milk, 1 time; dried beans, 1 time; ground beef, 2 times; bread, cereals and pastries, 5 times; and tea or coffee, 1 time. The homemaker said the 2-year-old child was the only one in the family served milk that day.

The homemaker had received the *Food for Fitness Guide* in the mail, and she was able to name three of the four food groups — the vegetable and fruit group was the only one she didn't remember. The evidence points to virtually no consumption of fresh fruits and vegetables. However, in response to pictures of the four food groups, the fresh fruits and vegetable group was the only one she did remember and to this she responded "vitamins." She did not know where she learned it — she "just knew." When asked what milk contained that was needed by the body, she said vitamin D but she gave no response or a wrong response for the other food groups. She said she received a letter concerning "good health" of the family and she read it.

The homemaker had seen a television program on buying children's shoes. She thought that "fitting" and "cost and construction of shoes" were the important things to consider in buying. She had talked with three relatives about keeping children in shoes that fit.

She said she would like to attend classes on sewing and fitting dresses and making children's clothes.

This homemaker had not been visited by anyone concerning the Extension program in the area. The interviewer wrote the following note at the conclusion of the interview: "I don't believe she attends demonstration classes, seems to have no outside interests — even her children are always at home."

DOLLAR AND PERCENTAGE OF TOTAL EXPENDITURES
FOR FAMILY LIVING IN 1964

Items[1]	**Dollars**	**Percent**	
Food	$1,206	36.	70
Clothing	702	21.	
Rent (utilities included except TV)	432	13.	
Electricity for TV only	12	.3	30
School supplies	39	1.2	
Newspaper (Sunday only—20¢)	10	.3	
Laundry supplies and cleaning	52	1.5	
Sewing supplies	12	.3	
Dry cleaning and pressing	54	1.5	
Recreation (movies—carload for 99¢)	6	.1	
School photographs	5	.1	
Christmas presents	10	.3	
Automobile (gas only—two cars)[2]	208	6.3	
Life insurance ($2.32 per week)	121	3.6	
Health and hospital (36¢ per week)	19	.6	
Social security and other retirement	198	6.0	
Medical supplies and medicine	12	.3	
Toiletries and cosmetics	60	1.8	
Barber shop (father barber for sons)	39	1.2	
Personal allowances (oldest son, $1, four others—25¢ per week)	104	3.0	
Church	52	1.5	
Charities	13	.3	
TOTAL EXPENDITURES	$3,366		
TOTAL INCOME	$2,597		
DEFICIT	$ 769	(30% of income)	

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[1] Items such as furniture, equipment, magazines, etc., were checked but no purchases had been made.

[2] Husband construction jobs—drives out of town part of time. Second car—groceries only.

Clothing Expenditures[1]

Item	**Unit cost**	**Total cost**
Husband		
Jacket	1	$12.95
Work pants	6 @ $3.95	23.70
Dress pants	2 -$13.95 & $8.95	22.90
Work shirts	6 @ $1.98	11.88
Sport shirts	3 @ $2.98	8.94
Undershirts	3 @ $1.25 & 1 @ 98¢	4.73
Shorts	6 @ 3 for $2.05	4.10
Work gloves (3 pr. per mo.)	36 pr. @ 88¢	31.68
Dress shoes	1	13.95
Work boots	3 @ $10.95	32.85
Socks	10 @ 3 for $1.00	3.35
TOTAL		$171.00

Item	**Unit cost**	**Total cost**	
Wife			
Coat	1	12.95	
Sweater	1	3.00	
Dress	3 -2 @ $2 & 1 @ $3	7.00	
Panties	16 @ 39¢	6.24	
Bra	5 @ 59¢	2.95	
Slips	4 @ 88¢	3.52	
Shoes	2 @ $5.99 & 2 @ $2.99	17.96	
Tennis shoes	1	1.00	
TOTAL			$ 55.00
Son—17 years			
Suit	1	24.95	
Shirts	12 @ $2.98	35.78	
Pants	8 @ $2.50	20.00	
Shoes	6 @ $9.95	59.70	
Boots	1	16.99	
T-shirts	8	5.48	
Shorts	8	5.48	
Socks (ROTC regulation)	3 @ 3 for $1.19	1.19	
Socks (regular)	37 @ 39	14.43	
Hat	1	8.50	
TOTAL			$192.00
Son—14 years			
Shirts	8 @ $1.00	$ 8.00	
Pants	3 @ $1.98	5.94	
T-shirts	6 @ 3 for $2.05	4.10	
Shorts	6 @ 3 for $2.05	4.10	
Shoes	4 -3 @ $5.00 & 1 @ $7.95	22.95	
Tennis shoes	1	2.98	
Socks	8 @ 29¢	2.32	
TOTAL			$ 50.00
Son—9 years			
Sweater	1	3.00	
Shirts	8 @ $1.59	12.72	
Pants	7 @ $1.59	11.13	
Dress pants	1	2.98	
Shoes	4 @ $3.98	15.92	
T-shirts	6 @ 49¢	2.94	
Shorts	6 @ 49¢	2.94	
Socks	12 @ 4 for $1.00	3.00	
TOTAL			$ 55.00
Daughter—16 years			
Suits	2 -$4.99 & $10.99	15.98	
Dresses	11 @ $3.98	43.78	
Panties	12 @ 3 for $1.00	4.00	
Bra	6 @ $1.00	6.00	
Slips	6 @ $1.00	6.00	
Socks (phy. ed.)	4 @ 59¢	2.36	
Shoes (4 phy. ed.)	10 @ $1.99	19.90	
Shoes (tap dance—School)	1	5.95	
TOTAL			$104.00
Daughter—6 years			
Coat	1	10.00	
Dresses	4 @ $1.59	6.36	
Panties	4 @ 4 for $1.00	1.00	
Slips	6 @ 59¢	3.54	
Socks	10 @ 25¢	2.50	
Shoes	4 @ $2.95	11.80	
Tennis shoes	2 @ $1.19	2.38	
TOTAL			$ 37.00
Daughter—4 years			
Dresses	4 @ $1.59	$ 6.36	
Panties	16 @ 4 for $1.00	4.00	
Socks	2 @ 20¢	.40	
Shoes	4 @ $1.98	7.92	
TOTAL			$ 19.00
Daughter—3 years			
Same as for 4 year old			
TOTAL			$ 19.00

Family total clothing cost

Family member	**Total cost**	**Percent of total**
Husband	$171.00	24
Wife	55.00	8
Son—17 years	192.00	26
Son—14 years	50.00	7
Son—9 years	55.00	8
Daughter—16 years	104.00	15
Daughter—6 years	37.00	6
Daughter—4 years	19.00	3
Daughter—3 years	19.00	3
TOTAL	$702.00	100

Case Study 2

This family was composed of the parents and five children. Both parents were in the 30- to 39-year-age group. The homemaker had 4 years of schooling in Mexico and the husband had 12 years in the United States. When the expenditure interview was made, a son of 9 years was in the second grade; a son 12 and a daughter 10 were in the fourth grade; and a son 13 was in the fifth grade. Schedules gave no indication of why these children were retarded in school.

The husband, only earner in the family, worked six days per week with seasonal overtime as a warehouseman at $1.15 per hour. He held this job at the time the Evaluation Study was made and when the expenditure schedule was taken. He earned approximately $3,000 in 1964. There was no supplemental income and no unemployment. This allowed a per capita income of $429.

When the expenditure schedule was taken, the homemaker said the family spent approximately $15 per week in the grocery store for food. She said an additional $3.50 was spent for dairy products; $1 in the bakery; and $5 in Juarez. In the Evaluation Study she estimated total expenditure was $15 to $19.99. The homemaker made a bus trip to Juarez every two weeks. It was assumed that the $5 was not spent weekly; therefore, food expenditures were established at $20 per week. This gave an average per meal per person expenditure of 15 cents. The husband spent $3 per week for lunch away from home. In the Evaluation Study the homemaker said she purchased about 1 pound of cheese per week, 6 pounds of meat and 5 pounds of dried beans. She purchased 8 large cans of evaporated milk and 4 half gallons of fluid milk. Husband and wife each drank 1 glass of milk the day before the interview; sons 8 and 12 and a daughter 9 drank 2 glasses each; and a boy 11 drank 3. The baby had 4 bottles during the day. The day before the interview the family had been served eggs 1 time, milk 2 times, dried beans 2 times and other starchy vegetables 2 times. Ground beef had been served 1 time; bread, cereals and/or pastries 4 times; and soft drinks 1 time.

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[1] Nightwear was omitted from the schedule by mistake.

The homemaker said she received the *Food for Fitness Guide* through the mail and had heard about it on television. At the time she did not have a copy of the guide. She said she knew the four food groups and was able to name all except breads and cereals.

When shown pictures of the four food groups and asked what the foods did for health, she said that milk, fruits and vegetables provided vitamins; meat provided energy; and breads provided protein. When asked how she happened to know this, she said she had had a letter in the mail and that she had seen a poster in the housing rental office. When asked what milk contained that was needed for strong bones and teeth, she responded, "calcium." She also knew that citrus fruits, etc., provided vitamin C for keeping gums and body tissues healthy. She had received mailed information and had seen posters and television programs on this. She said that she read the mailed information.

She had been visited by someone in her home about the foods program, but she could not remember who visited her. When shown a picture of the agent, she recognized her as the visitor. She had attended no classes. The homemaker said that she usually served a fruit rich in vitamin C for breakfast, but later when asked what she served that morning for breakfast, she said oatmeal, hot cakes and milk.

The homemaker said she would like to learn to "fix different things for meals and make money last." If she were going to attend classes, she would rather have them in Sherman Hall (Housing Center). This woman also wanted to attend classes on sewing and fitting dresses. She had seen and heard nothing about buying and fitting children's shoes. However, she wanted to attend classes on buying and making children's clothes.

DOLLAR AND PERCENTAGE OF TOTAL EXPENDITURES FOR FAMILY LIVING IN 1964

Item	**Dollars**	**Percent**	
TOTAL	$2,949	100	
Food (home $1,014; away $156)	1,170	40	
Clothing	266	9	69
Rent	600	20	
Sewing machine (payments)	66		
Sewing supplies	5	2	
Automobile (payments and gas)	432		
Bus fares	8	15	
Medical expense[1]	30		
Health and hospital insurance	30	2	31
Laundry, cleaning supplies	130	4	
Personal expense[2]	90	3	
Recreation (movies)	72	3	
Church	24		
School supplies	16		
Toys and games (Christmas)	5		
School photographs and camera supplies	5	2	
TOTAL FAMILY INCOME	$3,000		
TOTAL FAMILY EXPENDITURE	$2,949		
SURPLUS	$ 51		

There were no expenditures for newspapers, magazines, furniture and equipment; $12 for electricity with TV omitted; other utilities are included in rent in a public housing apartment. There was no purchase of snack food, liquor or tobacco.

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[1] Dentist $15; doctor $10; hospital $5.

[2] Cosmetics, etc., $24; barber $24; son—13 years, 50¢ weekly allowance; 10¢ per week for the "little ones."

Clothing expenditures

Item	**Unit cost**	**Total cost**	
Husband			
Jacket	1	$ 8.00	
Pants	6 @ $3.98	23.88	
Shirts	6 @ $2.49	14.94	
T-shirts	4 @ 79¢	3.16	
Shorts	4 @ 79¢	3.16	
Socks	9 @ 50¢	4.50	
Shoes	1	6.00	
TOTAL			$64.00
Wife			
Blouses	2 @ $1.99	3.98	
Skirt	1	2.99	
Underwear		4.00	
Hose	3 for $3.37	3.37	
Shoes	2 - $3.98 & $5.98	9.96	
TOTAL			$24.00
Son—13 years			
Pants	6 @ $2.99	17.94	
Shirts	2 @ $1.99	3.98	
Jacket	1	6.00	
Shoes	2 @ $4.98	9.96	
Socks	6 @ 3 for $1.00	2.00	
Shorts	3 for $1.75	1.75	
T-shirts	3 for $1.75	1.75	
TOTAL			$43.00
Son—12 years			
Same as for 13 year old			
TOTAL			$43.00
Son—9 years			
Pants	4 @ $1.99	7.96	
Shirts	5 @ $1.49	7.45	
Shoes	2 @ $2.99	5.98	
Socks	3 for $1.00	1.00	
T-shirts	3 for $1.75	1.75	
Shorts	3 for $1.75	1.75	
TOTAL			$26.00
Daughter—10 years			
Coat	1	$13.99	
Sweater	1	4.88	
Blouses	2 - $1.99 & $1.00	2.99	
Skirts	2 - $2.74 & $2.98	5.72	
Shoes	2 @ $3.98	7.96	
Tennis shoes	1	1.99	
Slips	2 @ $1.59	3.18	
Panties	4 @ 49¢	1.96	
Socks	6 @ 3 for $1.00	2.00	
Playsuits	2 @ $1.98	3.96	
Handbag	1	1.98	
TOTAL			$51.00
Daughter—2 years			
Sweater	1	1.98	
T-shirts	3 @ 98¢	2.94	
Pants	4 @ $1.29	5.16	
Shoes	2 - $2.98 & $1.99	4.97	
TOTAL			$15.00

Family total clothing cost

Family member	**Dollars**	**Percent**
Husband	$ 64.00	24
Wife	24.00	9
Son—13 years	43.00	16
Son—12 years	43.00	16
Son—9 years	26.00	10
Daughter—10 years	51.00	19
Daughter—2 years	15.00	6
TOTAL	$266.00	100

Case Study 3

At the time the Evaluation Study was made, this family was composed of husband, wife and three teenage children. Husband and wife were both in the 40-49-year-age group and both had completed from 5 to 8 grades in school. By January 1965 when the expenditure schedule was taken, the oldest son had reached the age of 20, and after 9 months with the family in 1964, he joined the armed services. This left an 18-year-old daughter who was a senior in high school and a 15-year-old son who was a freshman. The daughter was taking a course which included bookkeeping. This family was in extremely difficult circumstances. The father had not had full-time work within two years. Both studies indicated that he did "odd jobs" when they were available a few days each month. The income was reported as less than $1,500 in the first study and as less than $1,000 on the expenditure schedule.

A major problem for the family was that of trying to keep up payments on the home they were buying, and they were in real danger of losing it. House payments, electricity, water and heating fuel took 53 percent of the total expenditure of the family in 1964. Rent in public housing was taking as little as 13 percent for these costs for some other families in the area.

In the first study the homemaker reported that the family spent about $5 per week for food. In the second, she reported slightly over $10. The day before the interview, the homemaker said the family had been served eggs 1 time, dried beans 3 times, ground beef 2 times, chicken noodle soup 1 time, breads 3 times, cereals 3 times, soft drinks 1 time and tea or coffee 2 times. She said they purchased 2 pounds or less of cheese per week, 8 pounds of meat and 5 pounds of dried beans. Seven large cans of condensed milk and 1 quart of fluid milk were purchased per week. The day before the interview, no one in the family had had milk to drink.

The homemaker had a *Food for Fitness Guide* which she received in the mail. She could name the four food groups, but she did not know what any one of them did for maintenance and growth. She received a letter concerning food for good health and said she read it. She had attended no classes. However, she had seen and heard about weight control in a mailed piece, on the radio and on television. Her answer was incorrect concerning the danger of being overweight. She was able to give the name of the home demonstration agent and had been visited by her. What she wanted to learn about food was "how to save money on meals." She said she would like to have classes on buying and making children's clothing, although her children were in their teens. This homemaker when interviewed was so emotionally disturbed about the possible loss of their home that she was not able to give thought to other things. Unless the young people could get work or the father could be retrained and brought to a health level so that he could work, the future looked very dark.

DOLLAR AND PERCENTAGE OF TOTAL EXPENDITURES
FOR FAMILY LIVING IN 1964

Item	Dollars	Percent	
TOTAL	$2,070	100	
Food (average per meal 11¢)	600	29	71
Clothing	82	4	
Housing—payments	792	38	
Laundry and cleaning supplies	22	1	29
Electricity	96	4	
Water	132	6	
Heating fuel	81	4	
Automobile—gas and oil	156	8	
Medical supplies and medicines	12	1	
School supplies	42	2	
Barber shop	24		
Movies (carload 99¢)	3		
Cigarettes (1 pack per week—Mexican)	15		
Church	13	2	
TOTAL INCOME	Under $1,500		
DEFICIT	$500-$600		

Clothing Expenditures

Item	Unit cost	Total cost	
Husband—nothing			
Wife—See daughter for hose			
Son—20 years[1]			
Shoes	1	$10.00	
Shirts	3 @ $1.00	3.00	
Underwear and socks		6.00	
TOTAL			$19.00
Son—15 years			
Pants	3 @ $3.98	11.94	
Shirts	3 - 2 @ $1.59 & $1.98	5.16	
T-shirts	4 @ 2 for $1.00	2.00	
Shorts	2 @ 2 for $1.00	2.00	
Shoes	1	7.00	
Tennis shoes	1	3.00	
Socks	1	2.00	
TOTAL			$33.00
Daughter—18 years			
Dresses	2 @ $4.00	8.00	
Bras	4 @ $1.00	4.00	
Panties	4 @ 3 for $1.00	1.35	
Half slips	4 @ $1.00	4.00	
Hose (for mother and daughter)	6 @ 2 for $1.00	3.00	
Shoes	2 @ $5.00	10.00	
TOTAL			$30.00

Family total clothing cost

Family	Dollars	Percent
Husband	$ 0.00	0
Wife	0.00	0
Son—20 years[1]	19.00	23
Son—15 years	33.00	40
Daughter—18 years	30.00	37
TOTAL	$82.00	100

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[1] With family nine months and then joined the armed services.

Case Study 4

This family was composed of parents and five children. Both parents were in the 30- to 39-year-age group. There were two boys, 3 and 16 years of age, and three girls, 11, 14 and 15 years. The homemaker had completed 6 years and the father 7 years of schooling, both in Mexico. When the expenditure interview was made, the 16-year-old boy was in the eleventh grade and the girls were in the sixth, eighth and ninth grades.

The father was employed as a switchman for the full year of 1964 and had earned $5,200. This family had one earner and no other income.

In 1964 the homemaker said the family spent $35 per week for food; this same amount was spent per week for food when the expenditure schedule was taken. The average per meal per person expenditure was 35 cents. The four children ate lunch at school at a cost of $10 per week. The homemaker said she purchased 9 large cans of evaporated milk and 24 quarts of whole milk per week. She usually bought 2½ pounds of cheese, over 10 pounds of meat and 5 pounds of beans. The homemaker drank 3 glasses of milk and the father 4 the day before the interview. Also, the 11- and 14-year-old girls drank 4 glasses each and the other children 6 each. She was able to name the four food groups and knew calcium was the nutrient in milk which contributed to good bones and teeth and that vitamin C protected gums and body tissues. She did not know what dark green leafy and yellow vegetables contained that was needed by the body. This homemaker had gone to cooking school in Juarez, Mexico, because she did not know English. She had attended no classes or demonstrations in the area. She had learned that overweight caused heart trouble from her family doctor. She had been visited by the home demonstration agent and invited to attend food classes. She said she usually served a vitamin-rich fruit for breakfast and that she had served orange juice that morning. She used no prepared foods and was under the impression they were more expensive than raw foods.

The homemaker said she would like to attend sewing classes and preferred them in a neighbor's home. She had seen the television program on selecting and buying children's clothing and shoes. She knew that fitting was the most important consideration when buying shoes, and she had talked with four relatives and four other persons about the program. She wanted to learn to make and buy children's clothes and shoes in classes.

The homemaker received the *Food for Fitness Guide* in the mail and had a copy.

The day before the interview the family had been served eggs 1 time; milk 3 times; dried beans 3 times; other vegetables (not tomatoes and dark green leafy or yellow) 4 times; citrus 1 time; other fruits 3 times; lamb chops 2 times; breads and cereals 3 times; and other foods 2 times; and soft drinks 1 time.

DOLLAR AND PERCENTAGE OF TOTAL EXPENDITURES
FOR FAMILY LIVING IN 1964

Item	Dollars	Percent	
TOTAL	$6,159	100	
Food	2,275	37	
Clothing ($24 for sewing supplies)	603	10	64
Rent (house payments)	1,068	17	
Food mixer	16	[3]	
Record player and TV	276	4	
(payments $23 per month)	276	4	
Automobile (gas) ($3.00 per week)	156	3	
Bus for school children ($2.00 per week)	35	[3]	
Medical expense[1]	231	4	
Health and hospital insurance (did not know)			
Laundry, cleaning supplies	192	3	
Electricity, water, telephone ($72 each)	216	4	
Heating fuel	80	1	
Hired help (ironing)	156	3	
Household linens	40	1	36
Church, charities	21	[3]	
School supplies and fees	75	1	
Newspaper	57	1	
Magazines	36	1	
Garden hose	3	[3]	
Upkeep and repairs—outside plumbing	110	2	
Recreation	265	4	
Camera supplies and school photographs	8	[3]	
Toys, games, etc.	8	[3]	
Personal expense[2]	154	2	
Personal allowances	78	1	

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[1] Doctor $45; medical supplies and medicine, $168; vitamins $6 for 3 months.

[2] Includes 3 packs per week of cigarettes.

[3] Less than one-half of 1 percent.

Clothing expenditures

Item	Unit Cost	Total cost	
Husband			
Sweaters	3 - $6.00, $8.00 & 11.98	$25.98	
Pants	3 @ $4.98	14.94	
Shirts	1 @ $7.00 & 2 @ $4.00	15.00	
Shorts	3 @ 69¢	2.07	
T-shirts	3 @ 98¢	2.94	
Shoes	2 - $9.00 & $13.98	22.98	
Boots	1	14.95	
TOTAL			$ 99.00
Wife			
Car coat	1	12.99	
Skirts	3 @ $3.98	11.94	
Dresses	2 for $11.00	11.00	
Girdles	2 @ $2.98	5.96	
Bras	4 @ $1.00	4.00	
Hose		5.00	
Slips	2 @ $2.98	5.96	
Bags	2 @ $2.98	5.96	
Shoes	3 - $2.98, $1.98 & $5.98	10.94	
TOTAL			$ 74.00
Son—16 years			
Sweaters	2 @ $5.98 & 1 @ $6.98	18.94	
Pants	5 @ $3.98 & 2 @ $2.98	25.86	
Shirts	8 @ $2.98 & 1 @ $3.98	27.82	
Shorts	6 @ 69¢	4.14	
T-shirts	6 @ 69¢	4.14	
Shoes	3 @ $9.95	29.85	
Tennis shoes	1	3.98	
Boots	1	10.95	
TOTAL			$126.00

Item	Unit cost	Total cost	
Son—3 years			
Shirts and pants	3 @ $3.98	11.93	
T-shirts	4 @ $1.00 & 4 @ 79¢	7.16	
Jeans	4 @ $1.00	4.00	
Sweaters	2 @ $2.98	5.96	
Shorts	6 @ 49¢	2.94	
Shoes	3 @ $3.50	10.50	
Boots	1	9.98	
Socks	6 @ 39¢	2.34	
TOTAL			$ 55.00
Daughter—15 years			
Dresses	6 @ 3 for $11.00	$22.00	
Skirts	4 @ $2.98	11.92	
Sweaters	2 - $5.98 & $4.98	10.96	
Coat	1	13.98	
Gym suit	1	4.98	
Slips	6 @ $1.98	11.88	
Panties	6 @ 2 for $1.00	3.00	
Bras	6 @ 69¢	4.14	
Shoes	2 - $2.98 & $5.98	8.96	
Boots	1	5.69	
TOTAL			$ 98.00
Daughter—14 years			
Dresses	6 @ 3 for $10.00	20.00	
Sweaters	2 @ $4.98	9.96	
Slips	6 @ $1.98	11.88	
Panties	6 @ 2 for $1.00	3.00	
Socks	4 @ 2 for $1.00	2.00	
Shoes	5 - 3 @ $2.98, $4.98 & $3.98	17.90	
TOTAL			$ 65.00
Daughter—11 years			
Sweaters	3 - 2 @ $2.98 & 1 @ $3.98	9.94	
Dresses	6 @$2.98	17.88	
Choir suit	1	4.96	
Slips	5 @ $1.00	5.00	
Panties	8 @ 49¢	3.92	
Socks	8 @ 2 for $1.00	4.00	
Shoes	4 @ $1.98	7.92	
Tennis shoes	3 @ $1.98	5.94	
Bags	2 @ $1.00	2.00	
TOTAL			$ 62.00
Supplies for home sewing			$ 24.00

Family total clothing cost

Family member	Dollars	Percent
Husband	$ 99.00	17
Wife	74.00	12
Son—16 years	126.00	21
Son—3 years	55.00	9
Daughter—15 years	98.00	16
Daughter—14 years	65.00	11
Daughter—11 years	62.00	10
Supplies for home sewing	24.00	4
TOTAL	$603.00	100

Case Study 5

This family consisted of husband and wife, both in the age group of 30 to 39 years; sons 5, 10 and 11 years of age; and a daughter 8.

The wife completed 6 years of school in Mexico and 2 years in a private school in the United States. The husband had 3 years of high school and an additional year in a technical school in Mexico. The husband was employed by a dairy firm and drove a milk route. They had an annual family income of $4,228, which gave a per capita income of $704.

The homemaker had received a *Food for Fitness Guide* in the mail and had a copy available. She named all except the cereals of the four food groups. She could tell what the food groups did for health and said she had learned this through a letter. She said the home demonstration agent gave her a box of powdered milk, and she had used more of it since that time. In addition they used canned milk but no fluid whole milk. She said they used about 2 pounds of cheese per week, over 10 pounds of meat and from 3 to 6 pounds of beans. Parents and children each drank 2 glasses of milk the day before the interview. She named calcium as the nutrient provided by milk to protect the bones and teeth. This homemaker had attended all foods classes given at Sherman Hall. She had not seen anything about weight control recently but knew a danger of overweight was heart trouble.

She had been visited by the home demonstration agent and had prepared foods demonstrated in the classes. She wanted to learn more about cooking.

She had attended a class and had seen the television program on selecting and buying children's clothing. She was not interested in sewing because it took too much time to "cut and sew."

The family took no newspaper but received five magazines, including "Parents" and "Child Digest."

DOLLAR AND PERCENT OF TOTAL EXPENDITURES FOR FAMILY LIVING IN 1964

Item		Dollars	Percent[1]	
TOTAL		$4,628	100	
Food		1,560	34	
Clothing		558	12	61
Rent		714	15	
School supplies		12		
Magazines		48	1	
Mattress and toaster		128	3	
Laundry and cleaning supplies		24		
Hired help, baby-sitter, etc.		91	2	
Recreation		60		
Vacation trips		36		
Toys, games, etc.		40		
Bicycles		40	4	
Transportation—gas	$208			
Car repairs	275			
Other transportation	20	503	11	39
Health and hospital insur.		130	3	
Medical costs: Dentist	$ 12			
Doctor	50			
Medicine and supplies	47	109	2	
Toiletries and cosmetics	$ 48			
Barber	52	100	2	
Tobacco		137	3	
Personal allowances		312	7	
Church and charities		26	1	
TOTAL EXPENDITURES		$4,628		
TOTAL INCOME		$4,228		
DEFICIT		$ 400	(9.64 % of income)	

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[1] Percent of total expenditure.

Clothing expenditures

Item	**Unit Cost**	**Total cost**	
Husband			
Suit	1	$60.00	
Socks	8 @ 89¢	7.12	
T-shirts	6 @ $1.00	6.00	
Shorts	6 @ 3 for $2.05	4.10	
Work boots	2 @ $13	26.00	
Shoes	1	14.00	
TOTAL			$117.00
Wife			
Dresses	2 for $14 & 1 @ $10.95	24.95	
Hose		6.00	
Underwear		28.00	
Shoes	3 - $10.95, $12.95 & $5.99	29.89	
Bags	2 - $9.95 & $5.99	15.94	
Slippers	2 @ $2.00	4.00	
Robe	1	6.00	
TOTAL			$115.00

Homemaker said she could give seasonal expenditures for children only.

Fall school clothes	$ 60.00	
Christmas	40.00	
Spring	80.00	
Summer	12.00	
Scout suit	14.00	
Plus about $10 per month charge account	120.00	
Husband	117.00	
Wife	115.00	
		$326.00

Family total clothing cost

Family member	**Dollars**	**Percent**
Husband	$117.00	22
Wife	115.00	21
Children	326.00	57
TOTAL	$558.00	100

APPENDIX 3

Program of In-Service Training Conferences on Reaching Mexican-American Families with Extension Educational Programs

San Antonio, Texas, March 24-26, 1965, for Extension Districts 8, 10, 11 and 12
San Angelo, Texas, March 29-31, 1965, for Extension Districts 1, 2, 3, 4, 6 and 7

First Day

8:15 a.m. — Our Concern and Our Responsibilities
John E. Hutchison, Director, Texas Agricultural Extension Service

8:50 a.m. — Panel: Reaching This Audience

10:15 a.m. — Understanding the Mexican-American Culture
Arthur J. Rubel, Assistant Professor of Anthropology, University of Texas

1:15 p.m. — The Mexican-American Population in Texas — Demographic Characteristics and Relevant Sociological Research
Robert L. Skrabanek, Professor of Rural Sociology, Texas A&M University

3:30 p.m. — The El Paso Special Project — Background and Purpose
Florence W. Low, Assistant Director for Home Economics
Daniel C. Pfannstiel, Assistant Director

Second Day

8:15 a.m. — The El Paso Special Project — Methodology
Daniel C. Pfannstiel

8:45 a.m. — The El Paso Special Project — Findings and Implications
Starley M. Hunter, Extension Research Specialist, Federal Extension Service, U. S. Department of Agriculture

10:15 a.m. — The El Paso Project (Discussion continued by Dr. Hunter)

1:15 p.m. — Working with Mexican-American Families
Patricia Savidge, Former Associate County Home Demonstration Agent — Special Studies, El Paso County

1:45 p.m. — Youth Work and Involvement of Lay Leaders in Carrying Out a Program
Minnie Bell, Associate County Home Demonstration Agent — Special Studies, El Paso County

2:15 p.m. — Discussion

3:15 p.m. — Family Spending Patterns
Starley M. Hunter

Third Day

8:15 a.m. — Utilization of Teaching Plans
Louise Mason, Specialist in Foods and Nutrition
Mary Routh, Specialist in Clothing
Wanda B. Meyer, Specialist in Home Management

10:15 a.m. — Involving Clientele in Program Building and in Developing Appropriate Learning Experiences
Gladys D. Kolander, State Home Demonstration Agent

10:45 a.m. — Review of County Plan of Work; Developing a Program and Identifying Appropriate Methods (Individual and Small Group Work)

1:15 p.m. — Presentation of Examples — Discussion
Gladys D. Kolander

2:00 p.m. — Extension's Role and Responsibility in Programs for Limited-Income Families
Florence W. Low

2:45 p.m. — Summation
Daniel C. Pfannstiel

San Antonio Panel: Irene Gromatzky, District Home Demonstration Agent — Panel Moderator
Mildred Y. Martin, County Home Demonstration Agent, DeWitt County
Velda S. Stout, County Home Demonstration Agent, Victoria County
Johnny Watts, County Agricultural Agent, Maverick County
Loris J. Welhausen, County Home Demonstration Agent, Nueces County
Shirley W. Milford, County Home Demonstration Agent, Cameron County
A. H. Karcher, Jr., County Agricultural Agent, Hidalgo County

San Angelo Panel: Roberta Johnson, District Home Demonstration Agent — Panel Moderator
Argen H. Draper, County Home Demonstration Agent, Deaf Smith County
Mildred C. Patterson, County Home Demonstration Agent, Lubbock County
M. Juanice Boyd, County Home Demonstration Agent, Andrews County
Pete W. Jacoby, County Agricultural Agent, Crockett County
Cynthia Dillin, County Home Demonstration Agent, Tom Green County

(Note: Panel members reported on their own experiences in conducting educational programs for Mexican-American families.)

APPENDIX 4

Table 69. Consumer price index—1962 and 1967

	July 1962[1]	December 1967[2]	Rise
All items	105.5	118.2	12.7
Food	103.8	116.2	12.4
Housing	104.8	116.0	11.2
Rent	105.7	113.5	7.8
Home ownership	105.6	122.6	17.0
Apparel and upkeep	102.9	116.8	13.9
Transportation	106.8	117.9	11.1
Health, recreation & education	109.8	126.6	16.8
Medical care	114.6	140.4	25.8
Personal care	106.8	117.2	10.4
Reading & recreation	100.0	122.2	12.2
Other goods and services	105.6	121.4	15.8

[1] U.S. Department of Commerce, Office of Business Economics, **Survey of Current Business,** Vol. XLIV, No. 12, **Consumer Price Index 1962-1967** (Washington, D.C.: Government Printing Office, December, 1962), p. S-7.

[2] U.S. Department of Commerce, Office of Business Economics, **Survey of Current Business,** Vol. XLVIII, No. 2, **Consumer Price Index 1962-1967** (Washington, D.C.: Government Printing Office, February, 1968), p. S-7-8.